



ANNUAL REPORT

on the

PUBLIC HEALTH

of

WORCESTERSHIRE,

1927,

by

WYNDHAM PARKER, M.C.,

M.B., Ch.B. (Edin.), D.P.H. (Lond.)

County Medical Officer.



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TO THE

COUNTY COUNCIL OF WORCESTERSHIRE.

MR. CHAIRMAN, MY LORDS, LADIES AND GENTLEMEN,

Annual Report, 1927.

1. I have the honour to present my report on the health of the County during the year 1927.

2. This report is largely concerned with the activities of the County Council, as many of the District Reports are not received until late in the year at the same time I am able to record the latest position of the more important sanitary developments in the County so that this report is fairly up-to-date.

County Public Health Staff.

3. The only change in the Staff of Medical Officers is the appointment of an additional part time Officer (Dr. Eileen Bulmer).

District Sanitary Officers.

4. The following changes have taken place since my last Report —

DROITWICH BOROUGH.

Mr. C. T. Butler succeeded Mr. R. E. Hulse as Sanitary Inspector.

HALESOWEN URBAN,

Mr. J. C. Hicks succeeded Mr. J. W. Cox as Sanitary Inspector.

Hand-Book of County Health Services.

5. The issue of this Hand-book appears to have served a useful purpose and an up-to-date edition will shortly be published. Its value was particularly demonstrated in several instances by enabling earlier arrangements to be made for the removal of cases of Puerperal Pyrexia to Hospital.

A Retrospect and a Forecast.

(a) Retrospect.

6. It was suggested to me by the Chairman of the Public Health and Housing Committee (Colonel Henry Howard) that in view of recent changes in the Health Department it would be opportune to submit a resumé of the work of the Department during the 38 years which have elapsed since its inception.

7. The Public Health Committee on its formation in 1889 was fortunate in having as Chairman that eminent Hygienist, the late Sir Douglas Galton, and equally so in having Colonel H. Howard, to follow in the Chair.

8. The death-rate in the County in 1889 was 17.0 per 1,000 of the population ; in 1927 it had fallen to 13.0.

9. If the death rate had remained at 17.0 during the intervening years, there would have been 39,488 additional deaths in the County. The average yearly saving of life represented by the lower death rate since 1889 amounts to 1,067.

10. The average death rate of infants under one year of age for 1890-94 was 140 for every 1,000 births registered.

11. The first County Health Visitor was appointed in 1897, and from that date onwards the infantile death rate has steadily declined, until in 1926 it was 56 for every 1,000 births.

12. Since 1890, deaths from typhoid fever have been reduced to about one-eighth of what they were, deaths from diphtheria and tuberculosis have been approximately halved, and the deaths from measles, which numbered 136 in 1890, were reduced to 8 in 1926. The average number of deaths for the last 10 years from Measles is just over 30. Further improvement can only be looked for at present in improved treatment as the early infectivity of this disease makes control by isolation almost impossible.

(b) *Forecast of future work.*

13. The most striking change in the public health work of the County Council since its inception is the extension of preventive and supervisory efforts to include new duties of an executive character.

14. This work has increased to such an extent that other health committees have been necessary to deal with the medical inspection and treatment of school children, the supervision and treatment of infants, the formation of infant welfare centres, hospital provision for cases of puerperal fever, the treatment of tuberculosis in sanatoria and dispensaries, and the free treatment of venereal diseases throughout the area.

15. In addition to these activities, the County Council has schemes for the welfare of the blind, and for the supervision and care of mentally defectives.

16. In considering this record of progress, the Authority must recognise that there are still many ways in which advancement in the future may be looked for.

17. It will be necessary for some extension of the cripples scheme to be made in order that all cases arising may be dealt with.

18. Again, we are unable to cope with all the dental work required amongst school children, and when the immediate appalling results of rheumatism are considered as a factor in causing early deaths and lifelong disabilities, efforts for prevention in this direction are long overdue.

Housing.

19. Local Sanitary Authorities have responsibilities as to housing, and the County Council is entrusted with supervisory functions. The Council are exercising their powers under the Housing (Rural Workers) Act, 1926, but the powers to advance loans and provide houses for employees of the Council have so far been made little use of.

20. Slum clearance, except in a few isolated examples, remains an unsolved problem.

Drainage and sewerage schemes.

21. The increasing populations and the overcrowded conditions which exist in many parts of the county make the provision of efficient sewerage schemes very necessary. Combination by authorities, by which efficient and less costly schemes can be provided, must be the line upon which progress should be sought.

Water Supplies.

22. The shortage of underground water is becoming more generally recognised each year, and there can be little doubt but that increasing use of rivers as a source of drinking supplies will be made as the years progress. The prevention of pollution of rivers as well as efforts to improve polluted rivers, can be considered as one of the leading public health questions of the day.

Scavenging.

23. In rural areas, there is still great room for improvement. The provision of communal dumps is preferable to the multiple collections of rubbish which are to be found adjoining the cottages of many of our most beautiful villages. In Urban areas, arrangements are made for the collection of refuse, but in some districts the intervals between collections seem irregular and excessive. Much effort will be required before the sanitary bin replaces the ashpit which is a frequent source of nuisance.

Smoke Abatement.

24. A recent Act has given power to County Councils to act when a local sanitary authority is in default. There is room for much improvement in this direction in many of our industrial areas.

General Education in Health Matters.

25. This is a responsibility placed upon County Councils. Progress will result from well thought-out schemes, but to co-ordinate the efforts of numerous interested societies and persons is no easy task.

26. Until the individual is educated to a desire for improved conditions, legislation cannot produce the results hoped for.

27. Scientific research has proved of great use in combating diphtheria, anthrax, scarlet fever and typhoid, but to obtain the full benefits, local authorities must not only provide the treatment, but educate their populations to seek the advantages of this artificial immunity.

Natural and Social Conditions of the Area.

28. These were discussed in my Report for 1925.

Vital Statistics.

29. Table I. gives the Vital Statistics for the Year.



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30. The following figures give particulars of the County rates for the past 24 years :—

Years.		Birth Rate*	Net Death Rate*	Infantile Mortality Rates
1903-07	—	26.6	14.4	114
1908-12	—	23.4	12.9	99
1913-17	—	20.0	13.7	90
1918-22	—	19.6	13.3	68
1923	—	18.6	11.2	65
1924	—	17.9	11.4	62
1925	—	17.7	11.7	62
1926	—	17.2	11.4	56
1927	—	19.6	13.0	70
England and Wales 1927	—	16.7	12.3	69

*Per 1000 of the population. §Per 1,000 of the births registered.

31. The natural increase in a population is represented by the excess of births over deaths. Such factors as emigration disturb the balance, but the figures for emigration are at present comparatively small.

32. It would appear probable that the death rate is now somewhere near the lowest mark. The birth rate, on the other hand, continues to fall. What basic figure it will eventually reach is almost impossible to predict. The falling birth and death rate phenomenon is well known, but the results upon the population are not so fully appreciated. The prolongation of life of the individual, rather than births, is the cause of the present increase in population. The number of married women has continued to increase, whilst the number of children under fifteen living to-day is actually less than a few years ago. The result is that the population is becoming an older one each year.

33. It has been said that this points to the moral that we need to build houses faster than new schools. It certainly does present an explanation of that urgent demand for houses in many towns where the population is stationary, and the actual number of occupied houses has increased.

34. The fall in the birth rate is even more marked in the country than in the town, with a result that we have been described as "a nation of town dwellers to an extent that the world has never seen before." A small house in a large town is now the typical home of an Englishman.

35. The importance of this change in average age of the population upon certain rates is well illustrated if Cancer figures be considered. The cancer age may roughly be described as 40-70 (a few cases occurring earlier or later). The proportion of persons of this cancer age has been increasing each year, and before any comparison is made between cancer rates of 20 years or more ago, this factor must be allowed for.

36. Again, the country district with its many old people and absence of young adults has what appears to be an unsatisfactory death rate figure, unless it be understood that the figure is caused by the age constitution of the population rather than the unhealthiness of the district.

Prevalence of, and Control over, Infectious Diseases.

37. The following Table II. shows the number of cases notified in each County Sanitary Area.

TABLE II.

6A

District.	Scarlet Fever.		Diphtheria and Membranous Croup.		Enteric Fever.		Puerperal Fever.		Puerperal Pyrexia.		Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Ophthalmia Neonatorum.		Acute Poliomyelitis.		Pneumonia.		Encephalitis Lethargica.	
	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
<i>Urban</i>																						
Bewdley Borough	3		3								2	1	4	1					2			
Bromsgrove —	32		4								7	4	5	2					1	11		
Bromsgrove North	58		5	1							9	3	2	2					3	12		
Droitwich Borough	2		3								3	4	1							5		
Evesham Borough	7				1						16	8	5	1						10	1	1
Halesowen —	68		30	5	2		8	3	9		20	21	11	3	1				70	38	4	
Kidderminster Borough	14		10	2	1				6		38	30	26	4	5		1		28	30		
Lye and Wollescote	18		30	3	1				5		19	16	1	2	1				72	14		
Malvern —	25		4		1		1		4		9	10	1	3		1			26	11	2	
Oldbury —	45	4	32	2	3		3		13		49	21	14	9	6				164	58	4	2
Redditch —	62	1	6		3		2	1	6		22	16	7	2	1				32	9	4	2
Stourbridge Borough	21		5	1	1		3	1	4		15	10	6	4	5				66	11		
Stourport	2		2	1	1	1			1		4	3	5	2					24	6		
Totals —	357	5	134	15	14	1	17	5	48		213	147	88	35	19		1	1	488	213	15	5

Rural

Bromsgrove —	26	1	7				1		3		16	14	3	1			1		8	11		
Droitwich —	41				1				2		7	11	2	2	1				4	4		
Evesham —	7								2		7	6	3	2	3		1			6		
Feckenham —	12		1					1	1		3	1	1		1				4	4		
Kidderminster	5		1		1		2		1		7	4	3	1	1				15	6	1	1
Martley —	22		2		1	1	2		2		9	8	1	3	1				28	15		
Newent (part)	1										2	2								1		
Pershore —	9		4				1		2		16	6	6	2	1				38	11		
Rock —	1				1		1				5	1	1	1	1				2	1		
Shipston-on-Stour	5								2		2		2	1					8	2		
Stow-on-the-Wold (part)					1																	
Tenbury —	2		1	1	1				1		5	3	2	1					2	4		
Tewkesbury (part)	8								1		2		1	1					5	2		
Upton-on-Severn	25		3	2	2		1	1	4		18	12	4	2	1				41	8	1	1
Winchcombe (part)																						
Totals —	164	1	19	3	8	1	2	8	21		99	68	29	17	10		2		155	75	2	2
Grand Totals	521	6	153	18	22	2	19	13	69		312	215	117	52	29		3	1	643	288	17	7

Cerebro Spinal Fever. Three cases were notified, one in Kidderminster Borough, one in Oldbury Urban and one in Redditch Urban Districts.

Five cases of Anthrax were notified in Kidderminster Borough.

(a) The deaths refer to all cases of pneumonia, not those which are notifiable.

Scarlet Fever.

38. 521 cases (6 deaths) were notified in 1927 as compared with 435 cases (8 deaths) in 1926. It is noticeable that 4 of these 6 deaths occurred in the Oldbury Urban District, where 45 cases arose. This gives a case mortality rate which is unusually high. Dr. Sharpley states that the 4 deaths were infants all under the age of 5 years.

39. For the past 20 years the cases averaged 892 annually, and the deaths 15 annually.

Diphtheria.

40. 153 cases (18 deaths) were notified in 1927, compared with 199 cases (22 deaths) in 1926.

41. For the last twenty years the cases have averaged 309 annually and the deaths 31 annually.

42. No extension of the control of this disease by Schick testing and immunising has taken place during the year.

Enteric (Typhoid) Fever.

43. The following Table shows the cases and deaths since 1904 :

Years.	Cases.	Deaths.
1927 - - -	22	2
1926 - - -	11	4
1925 - - -	5	-
1924 - - -	16	2
1919-1923	21	3
1914-1918	21	2
1909-1913	55	12
1904-1908	107	19

44. The distribution was general, not more than three cases occurring in any one Sanitary District.

45. Dr. Sharpley mentions that the three cases in the Oldbury district were investigated. The cause, in each case, could not be definitely stated, but in one instance defective drains had existed, in the second tea had been made from water drawn from a condemned well, and the third was connected with the eating of shell fish.

46. Included in the Typhoid group are the diseases Paratyphoid A. and B., which were introduced in the War period, and such cases as occur are included in the figures given above. Outbreaks resembling food poisoning may be caused by these paratyphoid organisms.

Influenza.

47. 255 deaths from Influenza were reported in 1927.

48. The number of deaths occurring in each year since the severe outbreak in 1918 is as under :—

1926	—	—	—	83 deaths.
1925	—	—	—	131 „
1924	—	—	—	186 „
1923	—	—	—	77 „
1922	—	—	—	153 „
1921	—	—	—	52 „
1920	—	—	—	80 „
1919	—	—	—	336 „
1918	—	—	—	994 „

49. Influenza was very prevalent throughout the County in the early part of 1927. It was the main, or a contributory cause, of 132 schools being closed in the first quarter of the year. The number of deaths indicates that this is the most serious outbreak in the county since the visitation of 1918-19. The type of Influenza was not, on the whole, severe, but the deaths amongst the aged and the very young were far from uncommon.

50. I mentioned in my last report that the Infant Mortality rate for the year was likely to be adversely influenced by this outbreak. Dr. Geoffrey Dudley (Stourbridge Borough) states :—“ The “ Infantile Death Rate shows a slight increase over the preceding “ year, being 62.29 in 1926. This increase is mainly due to deaths “ from Broncho-Pneumonia and Bronchitis, which occurred during “ the Influenza Epidemic in the first quarter of the year.” He further states that 23 deaths were caused by Influenza in Stourbridge in 1927, as compared with 4 in 1926.

Smallpox.

51. No case of Smallpox was notified in the County during 1927 but a mild case occurred at Redditch in February 1928. No source of infection could be discovered and no subsequent cases occurred.

52. The numbers of cases in adjoining Counties in 1927 were :—

Gloucestershire	—	—	22
Herefordshire	—	—	2
Shropshire	—	—	1
Staffordshire	—	—	27
Warwickshire	—	—	83

53. The following Table shows the numbers of cases which occurred in England and Wales and in the County since 1911.

Year.	England and Wales.		Worcestershire.	
	Cases.	Deaths.	Cases.	Deaths.
1911	289	23	0	0
1912	121	9	0	0
1913	113	10	0	0
1914	65	4	0	0
1915	93	13	1	0
1916	159	18	0	0
1917	7	3	0	0
1918	63	2	0	0
1919	311	28	0	0
1920	280	30	0	0
1921	336	5	0	0
1922	973	27	0	0
1923	2,504	7	1	0
1924	3,792	13	0	0
1925	5,355	9	1	0
1926	10,095	18	0	0
1927	14,764	47	0	0
Total	39,320	266	3	0

Malaria.
Infantile Paralysis.
Cerebro Spinal Fever.
Encephalitis Lethargica.

54. No unusual features presented themselves in the County last year.

Measles.

55. Thirty-seven deaths (36 in Urban Districts and 1 in a Rural District) occurred last year as against 8 in 1926.

56. Dr. Craig states in reference to Kidderminster Borough :—
 “ A serious epidemic of measles commenced shortly after the
 “ schools re-opened in September. The cases were of severe type,
 “ probably aggravated by the very wet and cold summer, and
 “ broncho-pneumonia was a frequent complication. Nine deaths
 “ occurred, at the following ages :—

“ Under 1 year, 3 ; 1 to 2 years, 4 ; 2 to 4 years, 2.

57. "The serious nature of this complaint and its danger in children, especially under two years of age, is not sufficiently realised by the general community. Isolation of the first case in a house, usually a school child, is frequently neglected on the assumption that the younger children are certain to "take" it. While this may be true, the stern fact is overlooked that the more intimate and prolonged the contact is with the infected child, the more virulent and dangerous is the type of infection developed in the others."

58. In Worcestershire, 315 deaths from Measles have occurred in the last ten years. In the same period, the deaths from Scarlet Fever were 65, and from Diphtheria 209. The figure in respect of Measles would be greatly increased if all the fatal complications following upon this disease were included.

59. The treatment of Measles in Institutions should be considered when the question of Isolation Hospital accommodation for areas is under review. The principal aim would be not to control the infection, but to provide suitable accommodation and nursing for cases in need of it, and who could not obtain it at home. It would not be possible, or even necessary, to admit all cases of measles, and the selection could best be made by the Medical Officer of Health, on the grounds that the case was severe and urgently needed nursing, or that the overcrowded and unsatisfactory home surroundings rendered adequate home treatment impracticable.

60. There are at least six Isolation Hospitals in the County with satisfactory buildings and staffs, where such cases could be treated with, I believe, the greatest advantage to the individual and the community.

Anthrax.

61. Kidderminster Borough reported 5 cases, which is not unusual, the nature of the trade there being such that cases occur from time to time.

Erysipelas.

62. Dr. Craig, in the 1927 Report for Kidderminster Borough, states:—"An unusual number of cases of this disease occurred, 15 in all, and many of them were of the severe type which has been absent for many years. This affords a striking example of how a disease may, after a number of years quiescence, revert to its former virulent type."

63. Five cases were also reported in the Kidderminster Rural District in 1927; no cases arose in this District in 1926.

Cancer.

64. There were 442 deaths from Cancer in 1927. The following Table gives the County and District rates for the past 25 years.

TABLE III.
Death-rate per 10,000 of Population.

Districts	1927	Average for 4 years 1923-1926	Average for quin- quennial period 1918-1922	Average for quin- quennial period 1913-1917	Average for quin- quennial period 1908-1912	Average for quin- quennial period 1903-1907
<i>Urban Districts.</i>						
Bewdley Borough ...	30·6	15·3	12·8	17·5	15·6	8·8
Bromsgrove ...	9·2	12·8	6·4	11·4	12·0	7·2
North Bromsgrove ...	8·7	9·9	12·3	10·2	7·6	8·6
Droitwich Borough...	23·0	18·6	24·4	15·1	8·0	11·1
Evesham Borough ...	7·0	13·9	14·0	9·3	8·4	7·2
Halesowen ...	10·8	8·9	9·8	7·3	7·1	5·0
Kidderminster Borough ...	12·5	15·1	13·7	13·5	10·0	8·9
Lye & Wollescote ...	11·2	10·2	12·0	7·4	8·0	5·3
Malvern ...	17·0	14·7	15·7	14·8	15·9	9·4
Oldbury ...	13·2	10·1	9·0	8·4	8·0	6·2
Redditch ...	23·5	14·6	10·6	10·3	11·1	8·9
Stourbridge Borough	15·9	12·7	14·1	9·9	9·8	8·6
Stourport ...	19·6	21·7	24·4	17·8	11·5	12·8
Urban Districts ...	13·9	12·6	11·8	10·5	9·3	7·7
<i>Rural Districts.</i>						
Bromsgrove ...	13·4	13·8	10·5	11·7	8·0	8·3
Droitwich ...	15·2	15·8	10·6	11·5	9·6	9·4
Evesham ...	19·0	13·5	11·5	13·3	9·6	9·1
Feckenham ...	16·8	13·2	10·9	12·6	9·5	8·8
Kidderminster ...	11·7	13·8	12·2	9·4	13·9	11·1
Martley ...	18·4	14·0	11·5	14·2	11·3	8·8
Newent (part) ...	48·3	27·2	21·2	5·2	19·0	14·0
Pershore ...	7·0	14·6	13·1	11·0	9·9	8·4
Rock ...	13·4	12·5	14·4	24·5	10·5	9·1
Shipston-on-Stour ...	18·2	13·9	13·9	12·0	10·6	13·0
Stow-on-the-Wold (part) ...	0·0	36·5	28·8	13·4	13·3	13·7
Tenbury ...	6·9	18·1	9·4	10·6	10·9	8·1
Tewkesbury (part) ...	9·0	16·4	13·2	10·3	7·8	8·5
Upton-on-Severn ...	19·0	12·3	10·8	12·8	12·4	9·4
Winchcombe (part)	0·0	0·0	19·0	0·0	0·0	0·0
Rural Districts ...	14·9	14·2	11·6	12·0	10·2	8·6
County ...	14·7	13·1	11·6	11·0	9·6	8·2

Tuberculosis.

65. 311 cases of Pulmonary and 117 cases of Non-Pulmonary Tuberculosis were notified in 1927.

66. The corresponding numbers of deaths were 215 Pulmonary and 52 Non-Pulmonary.

67. The figures for 1926 were the lowest ever recorded in the County. In 1927 the deaths from both forms of Tuberculosis are higher. Figures based on five year averages give more reliable information than yearly variations unless the population is a very large one.

68. The difficulty mentioned in my last report over Statistical data has, I hope, been overcome by the adoption of a new card index system by which records will be entered weekly at this Office.

69. The alteration in the Tuberculosis Scheme whereby a whole-time Assistant Tuberculosis Officer undertakes only this particular work in the more heavily populated area of North Worcestershire has, I think, worked well. The original combination of duties (Schools, Infant Welfare and Tuberculosis) in the South of the County is satisfactory and I do not think it would advantageous to make any further changes.

70. The Report of the Chief Tuberculosis Officer (Dr. H. Gordon Smith) is appended to this Report.

Venereal Diseases.

71. The following Tables give information as to the number of cases treated in the County.

TABLE IV.

Institution.	"NEW" OUT-PATIENTS.					"NEW" IN-PATIENTS.					Total Attendances of all Patients.					SALVARSAN SUBSTITUTES.		No. ceasing attendance without completing treatment
	Syph- ilis.	Gonorr- hoea.	Soft Chancres	Not V.D.	Total	Syph- ilis.	Gonorr- hoea.	Not V.D.	Total days.	Syph- ilis.	Gonorr- hoea.	Soft Chancres	Not V.D.	Total attend- ances.	No. treated	No. doses		
Worcester	18	26	-	26	70	1	11	4	339	367	554	-	60	981	57	231	43	
Kidderminster	15	23	-	39	77	3	3	-	150	291	774	-	56	1081	59	213	53	
Birmingham	12	27	-	31	70	1	1	1	203	551	1150	-	45	1746	84	487	28	
Dudley	4	16	-	12	32	-	1	-	18	187	1221	-	58	1466	75	75	-	
Stourbridge	8	33	-	7	48	-	-	1	6	200	2110	-	14	2324	19	120	17	
Totals	57	125	-	115	297	5	16	6	716	1596	5809	-	233	7598	294	1126	141	
Corresponding totals for yr. 1926	60	103	-	96	259	3	4	3	362	1399	4521	-	161	6081	259	888	78	

* These figures refer to County cases only.

VENEREAL DISEASES.

This Table compares the number of County cases treated at Clinics in 1927, with those in the five preceding years, viz. :—

TABLE V.

Year	* Worcester			Kidderminster			Birmingham			Dudley			Stourbridge			Grand Total 1922-1927
	Syphilis	Gonorrhoea	Total	Syphilis	Gonorrhoea	Total	Syphilis	Gonorrhoea	Total	Syphilis	Gonorrhoea	Total	Syphilis	Gonorrhoea	Total	
1922	-	26	17	43	46	14	60	14	12	26	25	29	54	9	18	201
1923	-	21	16	37	44	19	63	17	22	39	38	41	79	24	33	251
1924	-	20	22	42	39	11	50	19	21	40	7	10	17	14	22	171
1925	-	17	17	34	29	13	42	9	29	38	17	11	28	13	16	158
1926	-	9	27	36	28	15	43	12	19	31	4	19	23	23	30	163
1927	-	18	26	44	15	23	38	12	27	39	4	16	20	33	41	182

* These figures refer to County cases only.

72. The chief points on the figures for 1927 are :—

- (1) The apparent increase in new cases of Gonorrhoea, especially in the north of the County, the figure 125 comparing with 103 and 83 for 1926 and 1925 respectively.
- (2) The increase in " in-patient " treatment.
- (3) The extremely unsatisfactory figure of 141 cases ceasing attendance without completing treatment.

73. Some propaganda work was undertaken. The places and times of Clinics were advertised in newspapers circulating in the County, and four Lectures were given by Dr. Hilda Shufflebotham, of the Womens Hospital, Sparkhill, to District Nurses, Midwives and Health Visitors.

74. We were fortunate in obtaining an exceptional Lecturer and the attendances were good, viz. :—

At Worcester	—	Attendance	—	45
At Redditch	—	„	—	23
At Stourbridge	—	„	—	43
At Oldbury	—	„	—	28

75. The Public Health Committee, when considering the question of propaganda, felt that information on this subject was more likely to reach the right individual through the District Nurse, Midwife, or Ante-Natal Centre, than by Lectures organised in towns or villages. Midwives in training at Worcester can now obtain practical instruction in recognising such cases as part of their training.

76. At the request of the Ministry of Health, the Agreement with the Kidderminster Hospital was revised and some reductions made in the charges.

Vaccination.

77. In view of the appearance of a case of Smallpox in the County in the early part of 1928, I was directed to obtain from the Schools the names of children whose parents were willing for them to be vaccinated or re-vaccinated. In this way the names of over 1500 children were forwarded to Vaccination Officers.

78. When it is remembered that about twenty-five per cent. of the children in Worcestershire Schools were vaccinated a few years ago when cases were occurring in Gloucester, the above figure does not indicate that objection is deeprooted in this County.

79. Whilst realizing the administrative difficulties, public vaccination in the hands of the family Doctor would, I think, probably result in a lower percentage of objections.

80. The present Smallpox is mild in character, but vaccination and re-vaccination affords a complete safeguard against this type of the disease.

Isolation Hospital Accommodation.

A. Fever Hospitals.

81. The accommodation available is given in the following Table :—

Districts.	Hospital situated at.	Diseases treated.	No. of adult beds provided
Bewdley Borough —	Foley Park, Kidderminster.	Scarlet Fever and Diphtheria.	28 and a discharge block.
Kidderminster Borough —			
Stourport Urban —			
Kidderminster Rural —			
Bromsgrove Urban —	Hill Top, Nr. Bromsgrove.	Scarlet Fever, Diphtheria and Typhoid Fever	47
Nth. Bromsgrove Urban —			
Droitwich Borough —			
Redditch Urban —			
Bromsgrove Rural —			
Droitwich Rural —	Bengeworth.	Scarlet Fever Diphtheria & Typhoid Fever.	about 25
Evesham Borough —			
Evesham Rural —	Three Springs Road, Persnore.	Scarlet Fever Diphtheria	21
Persnore Rural —			
Lye & Wollescote Urban —	Hayley Green, Nr. Halesowen.	Scarlet Fever Diphtheria & Typhoid Fever	51
Stourbridge Borough —			
Halesowen Urban —	Halfkey, Nr. Malvern.	Scarlet Fever Diphtheria & Typhoid Fever	26 and a discharge block
Malvern Urban —			
Oldbury Urban —	Smethwick & Oldbury Joint Hospital, Holly Lane, Smethwick.	Scarlet Fever, Diphtheria	40 17
Feckenham Rural —			
Feckenham Rural —	Kinwarton Road, Nr. Alcester.	Scarlet Fever & Diphtheria	16
Newent Rural (part) —	Patients sent to Isolation Hospital at Over, Gloucester.		
Rock Rural —	Cases sent to Hospitals in other districts.		
Martley Rural —			
Tenbury Rural —			
Shipston-on-Stour Rural —	Shipston-on-Stour	Scarlet Fever (only)	6
Upton-on-Severn Rural —	Upton-on-Severn	Scarlet Fever Diphtheria	18
Stow-on-the-Wold Rural (part)	Cases sent to Delancey Hospital, Cheltenham, by arrangement.		
Tewkesbury Rural (part)			
Winchcombe Rural (part)			

82. During 1928 I am visiting all the "Fever" Hospitals in the County as inspection does not appear to have been undertaken since the War.

B. Smallpox Hospitals.

83. The accommodation available is also shown in tabular form and the County is or soon will be well equipped to deal with cases of smallpox.

84. The accommodation for Smallpox cases at Shipston-on-Stour is not adequate, as without using the Administrative Block of the ordinary Fever Hospital, it would not enable any cases to be dealt with properly.

Districts.	Hospital situated at.	No. of beds provided.
Bewdley Borough —	Hospital to be erected at Tolladine Road, near Worcester, and will also provide for the City of Worcester.	
Bromsgrove Urban —		
North Bromsgrove Urban		
Droitwich Borough —		
Kidderminster Borough		
Redditch Urban —		
Stourport Urban —		
Bromsgrove Rural —		
Droitwich Rural —		
Kidderminster Rural —		
Martley Rural —	Haselor	16
Rock Rural —		
Tenbury Rural —		
Evesham Borough —	Near Halesowen	12
Evesham Rural —		
Pershore Rural —		
Lye & Wollescote Urban	Welland	6
Halesowen Urban —		
Stourbridge Borough		
Malvern Urban —	Coseley, Staffs.	Hospital provided by South Staffs. Joint Smallpox Hospital Board.
Upton-on-Severn Rural		
Oldbury Urban —	Alcester.	Hospital provided by Alcester and Feckenham Joint Smallpox Hospital Board.
Feckenham Rural —	Cases sent out of district but no further information supplied.	
Newent Rural (part) —	Shipston.	2
Shipston-on-Stour Rural —		
Stow-on-Wold Rural (part) —	Cases admitted to Delancey Hospital, Cheltenham. by arrangement.	
Tewkesbury Rural (part)		
Winchcombe Rural (part)	No arrangements.	

Maternity and Child Welfare.

A. Midwifery Service.

85. There were 257 Midwives practising in the County in 1927 ; of these 222 were trained.

86. The following information is taken from the annual returns of these midwives :—

87. Attendance of trained midwives where *no* Doctor was engaged :—

39	gave no return
28	attended no case.
83	„ 1—10 cases.
33	„ 11—20 „
14	„ 21—30 „
6	„ 31—40 „
19	„ 41 and upwards.
—	
222	
—	

88. Attendance of Untrained Midwives where *no* Doctor was engaged :—

6	gave no return.
9	attended no case.
13	„ 1—10 cases.
1	„ 11—20 „
2	„ 21—30 cases.
1	„ 31—40 „
3	„ 41 and upwards.
—	
35	
—	

89. The 45 Midwives who gave no return can be summarised as under :—

25	Left the County.
2	Died.
2	Retired.
16	Apparently did not practice as Midwives.
—	
45	
—	

90. Fifty-six District Nursing Associations received midwifery grants amounting to £800 and 5 midwives were given subsidies of £10 each.

91. During 1927, 5184 births were notified and of these 3002 were attended by Midwives.

92. The number of medical aid records received from Midwives last year was 966.

93. There were 516 claims passed for payment from Medical Practitioners for their fees when called to the aid of Midwives, amounting to £767 7s. 5d. against £537 in 1926.

94. The amounts received from patients was £122 11s. 7d. It was not necessary to serve any County Court summonses as in 1926.

95. The following usual Tabular statement is given :—

		1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
No. Births notified	—	5104	5401	7515	6590	6034	5828	5523	5528	5322	5184
No. Medical Aid Records notified	—	300	354	492	552	606	682	744	764	721	966
No. notified cases of phtharmia neonatorum	—	34	29	38	31	38	30	21	17	20	29
No. notified cases of puerperal pyrexia (a)	—	—	—	—	—	—	—	—	—	9	69
ever (b)	—	14	15	11	7	9	9	13	11	18	19
No. Maternal deaths	—	18	22	32	18	14	13	17	21	26	32
No. Still-births notified	—	191	182	253	232	211	200	181	167	181	178

Prosecution of illegal practice.

96. A prosecution was taken under the Midwives Act, 1926 and the woman who was illegally practising (after warnings) was fined £1 and £2 12s. 6d. costs.

Ophthalmia Neonatorum.

97. Twenty-nine cases were reported in 1927 ; 10 of these were treated in hospital and 2 received domiciliary treatment by arrangements made by the County Council with District Nursing Associations. The remainder were mild cases and adequate nursing medical arrangements already existed when the notifications were received. In all of these cases the children recovered without impairment of vision.

98. During the present year two cases were first discovered on admission to hospital. Inquiry elicited the fact that the respective midwives had themselves treated the infants' eyes instead of calling in medical aid. After enquiry each midwife was reported to the Central Midwives Board.

Puerperal Fever and Maternal Deaths.

99. In my last report attention was directed to the unsatisfactory maternal mortality rate in Worcestershire. It is unfortunate that no improvement as judged by the Mortality Rate for 1927 can be recorded. The figures of the Registrar General show that in Worcestershire during 1927 32 Mothers lost their lives at or shortly after childbirth ; 13 of these cases died of Puerperal Sepsis and the remaining 19 deaths were caused by other accidents or diseases connected with pregnancy.

100. As 5184 births were notified, the maternal mortality rate was 6 per 1,000 for the County, which is the worst rate recorded during the last 20 years.

101. The similar rate for England and Wales has remained stationary at about 4 per 1,000, so that the Worcestershire figure for 1927 is 50% in excess of even this admittedly unsatisfactory rate.

102. These figures are **most** disappointing, especially when it is remembered that 1927 was the first complete year in which Hospital treatment for septic cases was provided by the County Council.

103. As the subject of Maternal Mortality is everywhere receiving the closest attention, I have gone into the distribution of cases occurring in different county districts during the last 20 years. The figures referring to that portion of Worcestershire which was incorporated in Birmingham have been excluded to make the records comparable.

104. During the last 20 years, 490 deaths have occurred in connection with childbirth, 132 from septic complications and 358 from other accidents of childbirth. The average rates per 1,000 births over 20 years work out at 1.1 for septic cases and 4.1 from all causes.

105. Whilst North Worcestershire has some typically industrial areas, South Worcestershire is largely Rural. For this reason a comparison between Urban and Rural Districts is interesting :—

Urban Districts.	Births.	1908 to 1927			
		Total deaths from sepsis.	Total deaths from other accidents.	Average sepsis rate.	Average Maternal Mortality Rate (all causes)
Urban Districts	81379	92	229	1.1	3.9
Rural Districts	37965	40	129	1.05	4.4

106. It will be noted that the Maternal Mortality Rate from all causes is appreciably higher in Rural than Urban Districts, while the sepsis rate is about the same. Comparative curves for the County charted against the figures for England and Wales indicate that other accidents connected with pregnancy, rather than the sepsis rate, largely accounts for the high Worcestershire figures. This fact points to the need for better ante-natal care and hospital treatment for abnormal cases.

107. The variations from year to year are interesting :—

Maternal Mortality. (Rates per 1000 births).

	All causes.		Puerperal Sepsis.	
	England and Wales.	Worcestershire.	England and Wales.	Worcestershire.
1908		4.2		.8
1909		3.5		.5
1910		4.9		.4
1911	3.67	3.9	1.43	.9
1912	3.78	3.8	1.39	.6
1913	3.71	2.7	1.26	.4
1914	3.95	5.4	1.55	1.09
1915	3.94	3.6	1.47	.5
1916	3.87	4.4	1.38	1.5
1917	3.66	5.7	1.31	1.8
1918	3.55	3.6	1.28	1.6
1919	4.12	4.6	1.67	2.2
1920	4.12	4.5	1.81	1.2
1921	3.71	2.8	1.38	.7
1922	3.58	2.4	1.38	.6
1923	3.60	2.2	1.30	.7
1924	3.70	3.6	1.39	1.2
1925	3.86	3.8	1.56	1.09
1926	3.87	4.8	1.60	2.07
1927		6.2		2.5

108. In 1919-23 the improvement was steady and marked and the County figures were relatively satisfactory, but in 1925-27 the position was reversed and the rates have got steadily worse.

109. On the assumption that an improved midwifery service would provide a remedy, the increasing percentage of trained, as against untrained, midwives in the County, should influence these rates but this is not apparent. It must also be remembered that the training of midwives has only recently been extended and this improved training has not so far had an opportunity of influencing the rates.

110. The following statement shows the respective numbers of trained and untrained Midwives in the County in the last nineteen years, viz. :—

	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919
Trained	78	94	95	104	105	113	101	123	114	116	133
Un- trained	173	172	158	148	134	130	97	113	103	92	88
Total	251	266	253	252	239	243	198	236	217	208	221
	1920	1921	1922	1923	1924	1925	1926	1927			
Trained	139	164	174	191	201	209	205	222			
Un- trained	84	74	66	59	54	47	42	35			
Total	223	238	240	250	255	256	247	257			

111. Further, since 1917, a study of the medical aid records sent by midwives to doctors points clearly to increased co-operation, in that doctors are being called more frequently to midwifery cases in the County each year. The following figures are calculated on the average number of medical aid records received per 100 cases attended by Midwives :—

1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
9	11	10	12	18	19	22	23	24	32

112. It is interesting to note that the years 1921-23 when the Worcestershire figures were the best recorded, the midwives were sending for doctors more frequently each year. The subsequent tendency to increase noted in the years 1924-27 was accompanied by opposite results, so that no practical deductions can be drawn.

113. A study of the stillbirth rate per 1000 births over the same period shows no marked tendency to vary, the rate falling from 42 to 34 per 1000 births between 1900-27. No apparent connection can be demonstrated between the stillbirth rates and maternal mortality.

114. During 1926, the Puerperal Fever and Puerperal Pyrexia Regulations were in force and certain information as to fatal and non-fatal cases is now available.

115. *Notification.* 19 Notifications of Puerperal Fever were received and 69 notifications of Puerperal Pyrexia. The majority of the latter were definitely connected with parturition. In 14 cases only was it stated that the Pyrexia was unconnected with parturition, the causes being given as under :

Chest conditions 2, Pneumonia 1, Influenza 8, Scarlet Fever 1, other causes not stated 2.

116. The deaths from septic complications numbered 13 ; 3 of these had not been notified under the Regulations. The first case was brought to my notice before the Registrar General's figures were available. The practitioner informed the Local Medical Officer of Health that he thought the Regulations only referred to cases of Fever arising within 48 hours of birth. In this particular area information as to duties under the above-mentioned Regulations had been circulated to all Doctors in the district and the attention of the practitioner was directed to these Regulations. The remaining 2 cases occurred in Hospitals following upon operations, one for incomplete abortion and the other caesarean section. These were discovered in checking the notifications with the Registrar General's figures.

117. Although it is unlikely that notification is absolutely complete, in most areas notification is now being carried out. No notifications of Puerperal Pyrexia or Puerperal Fever were received from the Bromsgrove Urban and North Bromsgrove Urban Districts or the Boroughs of Bewdley, Droitwich or Evesham. Notifications have been received from all the other sanitary districts of any size.

118. The incidence of and fatality from septic complications estimated from the available figures would appear to be :—

Registered Births.	Febrile Puerperal cases.	Fatal cases.
5090	74	13

giving an incidence rate of between 1% and 2% and a case mortality rate of just under 20%.

119. No definite information of the numbers of abortions in the County is available, but in one country district the local Medical Officer of Health (who is also in practice) informed me that in his area a very considerable increase of such cases has occurred in the last few years.

Diagnosis and Treatment of Puerperal Cases (County Scheme).

120. Consultations were arranged for in 26 cases, 20 were in Urban areas and 6 in Rural areas.

121. Forty-one cases were admitted to Hospital during the year. Of this number 7 died, one on the day of admission, 2 the following day and three cases on the 4th, 5th and 7th day respectively after admission. One case was in Hospital for 36 days but subsequently died at home.

122. Nurses were supplied in 2 cases (one of which proved fatal). Anti-streptococcal serum was supplied in one case.

123. The remaining 5 septic cases included 3 who died at home (1 not notified and 2 too ill to move) and two cases died in General Hospitals after operations apart from the County Scheme, neither being notified.

124. The question of Maternal Mortality is at present not fully understood and until complete information is available it is hurtful rather than helpful to attempt to apportion blame upon Doctor or Midwife. Whilst many cases can be prevented, there remain a proportion which arise most inexplicably and unexpectedly. Reports upon all fatal cases will in future be forwarded to the Ministry of Health for expert consideration, when it is hoped that some light will be thrown upon this difficult question.

125. The most important point for consideration is what further local action, if any, can be taken in Worcestershire to deal with this problem.

126. The requirements of any area for an adequate Maternity service should include :—

- (a) a sufficient and efficient supply of Midwives
- (b) Ante natal supervision by Doctor and Midwife
- (c) Institutional accommodation for certain normal confinements and complicated labour cases.

(a) *Midwifery Service.*

127. It should be possible for every woman to have the services of a properly trained midwife at her confinement. At present this ideal is not obtainable. There are parts of the County uncovered by District Nursing Associations where the population is so small that no independent Midwife could hope to make a living—Bockleton, Stoke Bliss, Tredington and Newbold are examples. At present I see no other solution than to press for further district Nursing Associations. As the untrained bona fide Midwife disappears these rural areas become a greater problem. Unless some modern form of locomotion backed by the availability of telephonic communication is adopted, which would allow of larger areas being covered, it is doubtful whether the right type of Midwives will be attracted by the work in country districts. Midwifery in such areas is well described in a recent report as being “an arduous exacting profession with poor rewards and compensations.”

128. The work of the Queens Nurses recently analysed and discussed by Mr. Fairbairn, the eminent Gynecologist, conclusively indicates that the better trained Nurse-Midwife can produce a great diminution in maternal mortality. This higher trained Midwife can only be available for all cases when the supply is increased or more economically distributed.

129. To obtain an adequate and efficient midwifery service is an aim which is not easily achieved. Even if it was financially possible, some considerable alterations would of necessity have to be made in this County to keep highly qualified nurses contented in certain districts. It is easy to adopt the role of the destructive critic, but constructive suggestions are either difficult or impracticable.

130. The most obvious solution is a state midwifery service with a minimum income guaranteed. If authorities were to attempt to insist upon only fully trained nurses, with the Central Midwives Board certificate, being added to the Register, this would probably be the ultimate and only solution, but it is doubtful whether such a proposal would be workable. It is difficult to express an opinion as to whether the 12 months training recently introduced will produce a satisfactory midwife as this procedure has not been in operation sufficiently long. Even if it is decided that this minimum period is sufficient, further efforts will have to be made to make the profession of midwifery more attractive if the supply is to be maintained and increased. Short of state service some of the attractions might take the following lines :—

(i) *Rural Areas.*

(1) Nursing Associations must be encouraged in every way possible. This may lead to substitution of the district nurse for the whole-time health visitor. Generous Maternity grants to associations, undertaking midwifery should be made.

(2) The obtaining of the Central Midwives Board certificate by trained nurses must be facilitated in every way possible, and free training should be provided for such nurses who undertake to practise the profession of midwifery. Extra grants should be payable to District associations employing Queens Nurses.

(3) Improved forms of locomotion to allow of bigger areas being served.

(4) Some form of pension on a contributory basis in cases of old age or ill health.

(5) A Nurse's Cottage or other suitable accommodation for a professional worker should be provided by every district Nursing Association.

(ii) *Urban Areas.*

(1) Midwives should be encouraged to undertake ante-natal work, and receive payment for such work through the Local Supervising Authority.

(2) A minimum midwifery fee should be guaranteed to every midwife by the Local Supervising Authority.

(3) No minimum income should be fixed but subsidies by Local Authorities must be available to assist the establishment and maintenance of new midwives in approved areas where they cannot earn a living, the amount to depend on the circumstances of each individual case.

(4) Pension scheme for old age or ill health.

131. In both Urban and Rural areas facilities for periodic post graduate classes, or lectures at intervals should be arranged. A series of relief nurses must be provided to fill the vacancies in emergency, holiday times, periods of ill health or for post graduate instruction as outlined above.

The Holt Ockley Cottage Benefit Nursing Association.

132. This Association does a certain amount of work around Bromsgrove and Rubery. Last year 156 general cases and 57 midwifery cases were attended. Several cases were attended in the Martley Rural district where there are not many Nursing Associations. Usually 10—12 nurses are employed on the staff; 3 have the Central Midwives Board certificate and some have had training in Poor Law or other hospitals.

133. The system is intended to provide the cottager with a nurse at a cost within their means. Workers with less than 40/- per week pay an annual subscription of 3/- and 6/- per week for the nurse when employed. Others pay according to their means. The nurse lives in or has lodgings found for her in the village. There are 30 representatives for different districts who investigate the home before the arrival of the nurse.

134. The obvious difficulty is often that the home cannot provide satisfactory, if any, accommodation at all for the nurse. This Association can do useful work, and in the nursing of certain types of general cases, it supplies an undoubted need, but the activities should not overlap those of the district Nursing Associations. Midwifery cases should only be attended by a nurse with the Central Midwives Board certificate, as otherwise the economy in the nurse must be counteracted by the fee of the doctor. When a District Nursing Association exists, it requires all the local support possible to continue successfully but the Holt Ockley activities are required for special cases where no midwife is available locally, and for the nursing of cases of chronic or acute illness in their own homes.

135. The extension of such an arrangement as outlined might be generally adopted for midwifery, but I cannot help thinking that it would abolish the local district nurse whose activities and usefulness from a general health point of view extend far beyond the Maternity period, and the removal of the local element would curtail much of the usefulness of these nurses.

136. The Holt Otley system seems to provide a solution for certain maternity and other cases of illness which could not otherwise be economically attended, but I should like to see such work run by or at any rate co-ordinated with the work of the County Nursing Association.

(b) *Ante Natal supervision.*

137. Almost everyone is agreed on the necessity for ante-natal supervision if deaths and illhealth following upon parturition are to be prevented. The Ante-Natal clinics in Urban areas such as Oldbury, Halesowen, and Stourbridge are doing excellent and necessary work, but in small Urban and Rural areas it would be better if patients depended upon their own doctors for any supervision other than that obtainable from Nurse or Midwife, but at present payment is the difficulty. The Midwife is instructed that she is to do it, and gets nothing for it, except added responsibility; the doctor is not paid for it and consequently it is not at present carried out to any extent.

138. Public opinion is now taking up the question of maternal mortality. Women are being rightly urged that they should place themselves under skilled supervision but how is it to be carried out in rural areas generally? The payments cannot be made by the patient in many cases and it is unreasonable to expect Midwives to travel long distances and provide themselves with appliances for which they get no extra remuneration at all. The Doctor and Midwife ought to be paid for services rendered if progress is to be made. I hope the Committees appointed to deal with these problems will be able to give authorities a lead as to how these duties can best be carried out.

Ante-Natal Clinics.

139. The Halesowen Ante-Natal Clinic was opened on 5th March 1927. This was followed by Clinics in Oldbury, Langley and Stourbridge, where whole time sessions solely devoted to ante-natal work have been commenced. These 4 Clinics are attended by lady doctors on your staff who have had special post graduate hospital experience in this particular branch of work. The results are encouraging, and local demands for increase in the work are, with some difficulty, being complied with.

140. The midwives in these particular areas have been very helpful, and I put down the initial success of these centres to a proper method of commencement, namely, to first meet the midwives and explain the aims of such Clinics. Previously I have mentioned that the midwife ought to be paid for ante-natal work and I can instance cases where midwives have sent cases to ante-natal Clinics, which were rightly recommended to seek admission to special hospitals. The midwives in such instances lose their confinement fees and get no recompense for the ante-natal work. This is wrong, as the midwives need to be encouraged to persevere with such work, for ante-natal work to be successful demands the midwife's full support.

141. Ante-natal Record Books have been sent to each midwife with instructions to refer to the Assistant County Medical Officer when difficulty is experienced in filling in the details. The simplification of these records would, in my opinion, be an advantage in this County.

142. There is an Ante-natal Clinic in the Borough of Kidderminster which is under the control of the Town Council, the County Council having no jurisdiction with regard to it. This clinic was opened in 1923.

(c) *Institutional Accommodation.*

143. I gave information in my last report as to the Hospital accommodation for Maternity cases in Worcestershire. Roughly, it may be said that only the Poor Law Institutions make any provision in the way of reserved beds for such cases. The 8 Cottage Hospitals in the County have no accommodation and only occasional cases are admitted to the General Hospitals at Stourbridge, Worcester and Kidderminster. Some Worcestershire cases find their way to Birmingham Hospitals.

144. At the time of writing this report, I have had enquiries from a Doctor asking what arrangements have been made for dealing with a certain dangerous complication of pregnancy. This case was unsuitable for a Poor Law Institution (unless properly equipped for dealing with such cases) and the patient could pay for treatment in a Maternity Home. Many such cases occur each year.

145. Voluntary Hospitals are now starting contributory schemes and I should like to see provision made for such cases as part of the Scheme. If the County had, in addition, an arrangement with certain of the larger Hospitals to take serious cases which could not be dealt with suitably in the Cottage Hospitals, no need for any new Hospitals would arise. Some of the larger Poor Law Hospitals in other parts of the country, such as the Hallam Hospital, set aside special accommodation for maternity cases and payments are made by the patients according to their means. Such arrangements are very satisfactory, but the smaller Unions have no special facilities to deal with abnormal cases; further, the patient or family do not like going to a Poor Law Union, and it only seems right that those who make provision by contributory schemes should be able to receive treatment in local Hospitals to which they subscribe.

146. The Council decided in 1921 to make arrangements for dealing with complicated maternity cases in Hospitals and agreed to accept responsibility for payment after inquiry into the circumstances of the patient but these proposals were not agreed to by the Ministry of Health and no further action was taken.

147. The Minister's refusal to sanction the County proposals was influenced by the "economy campaign" and similar proposals would probably now be approved.

148. I hope the question will be reconsidered in the near future for it is the other accidents and complications of pregnancy even more than septic cases which require specialised hospital treatment. Both ante-natal supervision and enquiries into maternal deaths will prove of little avail unless these fundamental requirements are available.

B. Infant Welfare.

149. The following visits were paid to infants in 1927, viz. :—

By County Health Visitors	—	—	27,965
By District Nurses	—	—	19,103
By Voluntary Agency Nurses	—	—	8,869
By Kidderminster Corporation Nurse	—		5,127

150. The following details relate to the Voluntary Agencies which exist in the County. viz. :—

Voluntary Agency Centres.

Centre.	Average Weekly Attendances.		
*Broadway	—	—	24
*Alvechurch	—	—	20
Evesham	—	—	42
Stourbridge	—	—	43
Malvern Link	—	—	37
Poolbrook	—	—	40
Newtown	—	—	40
*Wyche	—	—	21
Tenbury		—	Closed
†Tardebigge	—	—	11
*Blockley	—	—	20
*Fairfield	—	—	15
†Upton-on-Severn	—	—	6

Kidderminster Corporation Centres.

Prospect Lane, Kidderminster	—	82
St. John's, Kidderminster	—	62
Orchard Street, Kidderminster	—	53

* Opened Fortnightly.

† Opened Monthly.

151. I referred last year to the great value of the work of these Voluntary Centres and also to the work of Voluntary helpers at the County Council Centres. Their assistance and enthusiasm is invaluable. It is hoped that another Voluntary Centre will be established at Bewdley in 1928.

152. The following statement refers to the County Council Centres :—

County Council Centres.

Centre.	Average Weekly Attendances.			
*Redditch	—	—	—	104
Oldbury	—	—	—	117
Warley	—	—	—	72
Langley	—	—	—	63
Lye	—	—	—	52
Halesowen	—	—	—	90
Cradley	—	—	—	74
Blackheath	—	—	—	105
Bromsgrove	—	—	—	70
Catshill	—	—	—	14

* Redditch Centre was closed for 8 weeks owing to Whooping Cough.

153. Medical Officers attend weekly at all the larger Centres provided by the County Council.

Infant Mortality Rate.

	Births.	Deaths under 1 year.	Infant Mortality Rate.
1926	5309	296	56
1927	5090	356	70

154. This shows that although there were 219 fewer babies born in 1927 than in 1926, 60 more deaths under 1 year of age occurred in 1927.

155. Although 1926 was a record year for the County, the 1927 rate is disappointing and I hope it will be improved upon.

156. Last year was not a hot one and, as might be expected, diarrhoea was not the cause of this increase, although deaths from this complaint still occur.

		Deaths from Diarrhoea under 2 years of age.	
		1926	1927
Average County Births	5200	36	26
„ Oldbury Births	850	10	5
„ Kidderminster Births	460	7	5

157. Diarrhoea in infants is largely caused by bad sanitation, or by ignorance and bad mothercraft.

158. Deaths due to Congenital Debility, Malformation, and premature birth increased from 147 in 1926 to 170 in 1927. It is difficult to account for this. Excluding smaller districts with less than 100 births, the following Urban Districts have rates of over 80 per cent. in 1927 :—Kidderminster Borough, Oldbury Urban District, Bromsgrove and North Bromsgrove Urban. The only Rural District with a rate over 70 per cent. was Pershore.

Baby Week.

159. The Langley Infant Welfare Centre obtained the "Hardy Banner" in 1927. This achievement is fully deserved by the very efficient Voluntary Committee, the Assistant County Medical Officer and Health Visitor. I regret that it has not yet been found possible to provide more suitable premises for this Centre. The existing building is badly lighted and ventilated and not suitable for the purpose for which it is now used. No other premises have been found, but the matter is being considered.

Grants for the Training of Midwives.

160. Hitherto, the object of Grants has been to give financial aid towards the training of the Midwife.

161. The new Regulations of the Ministry of Health allow of grants on an equal basis being made to County Nursing Associations, regardless of whether they train or supply a midwife: this is a system which might be open to abuse.

162. What is needed is an increase in the number of midwives, and such financial aid as is available should be given to the Associations which actually train women for midwifery service.

163. Another drawback to the regulations is that no grant is paid if the candidate fails in her examination. If the midwifery service was overcrowded the principle of paying by results might be justified, but at the present time it may hinder the supply.

164. Obviously the Superintendents of the Associations can now take no risks; they must turn down any applications except the "certainties"; otherwise they train board and lodge a candidate for 12 months, without any definite assurance of outside aid.

165. The County is fortunate in possessing a very excellent Voluntary Nursing Association and it is desirable that they should be aided financially in such a way as will be commensurate with the work they are doing.

Nursing and Maternity Homes.

166. The following information as to the action taken under the Act to date is given at the request of the Ministry of Health :—

Number of applications for registration	—	—	21
Number of Homes registered	—	—	19
Number of applications refused	—	—	2
Number of appeals	—	—	—
Number of applications for exemption	—	—	6
Number of exemptions granted	—	—	6

167. In each case before a certificate of registration was given, one of the Assistant County Medical Officers visited the premises and submitted a report on the condition of the Home. Most of the " Maternity Homes " are small houses with one or two beds and in some cases they are not ideal : at the same time information was placed before the Committee from local Medical men that the home was supplying a useful purpose.

168. With a knowledge of the overcrowding existing to-day and in the absence of Maternity beds in Homes or Hospitals, it seemed unwise to refuse registration where the conditions were reasonably good.

169. Byelaws on the lines of those framed by the Ministry of Health have been adopted and at the annual re-inspection of Homes enquiries will be made as to the extent to which the provisions in the Byelaws are carried out.

Housing of the Working Classes.

170. Much has been done by Sanitary Authorities in the County to provide additional houses, but in view of the large number of condemned houses occupied, the condition cannot be described as satisfactory.

171. Last year, I specially mentioned the Borough of Bewdley as a place where no new houses had been built. The reproach will shortly be removed, as the Corporation have obtained land on which they propose to erect thirty houses.

172. Regulations made by the Ministry of Health under the Housing and Town Planning Act 1909, provide for the inspection of dwelling houses in Sanitary areas, and set forth the headings under which information is to be given by the Sanitary Officer as to the state of the house.

173. Records of these inspections are to be kept. The Sanitary Authority is required to take such records into consideration, and to give such directions as may be within their power. It is therefore obligatory for Local Sanitary Authorities to cause a thorough inspection of their district to be made.

174. Although, as previously mentioned, a considerable number of new houses has been built in the County during the last ten years, I have reason to think that in many County Sanitary areas the work of inspection is not being kept up to date. The probable cause is increased duties, such as Meat Inspection, and Inspection of Dairies and Cowsheds, without any increase in staff.

175. The Sanitary Inspectors have, I know, numerous duties to perform, and large rural areas to traverse, but in view of the importance of improved Housing, I think the Council should again draw the attention of Local Sanitary Authorities to their obligations, and ascertain whether it is not possible to carry out these important regulations more thoroughly.

176. The following tabular statement shows how the Housing Survey is progressing, and the number of houses erected in each of the past six years :—

District.	Average annual No. of Houses inspected 1922—1927 inclusive	No. of houses erected by Local Authority.						Total No. of Houses erected by private enterprise 1922—1927 inclusive.	Total No. of Houses erected 1922—1927 inclusive.
		1922	1923	1924	1925	1926	1927		
Urban									
Bewdley —	79	—	—	—	—	—	—	17	17
Bromsgrove —	125	—	—	—	—	16	28	76	120
North Bromsgrove —	139	—	—	—	—	—	—	282	282
Droitwich —	172	—	—	—	4	8	—	49	61
Evesham —	414	—	—	12	42	—	78	69	201
Halesowen —	189	62	—	—	24	57	60	256	459
Kidderminster —	440	34	—	—	—	8	52	372	466
Lye & Wollescote —	487	25	12	20	31	35	62	35	220
Malvern —	208	86	—	—	—	—	34	186	306
Oldbury —	488	40	82	22	76	99	260	749	1328
Redditch —	261	118	—	—	—	35	40	275	468
Stourbridge —	249	101	27	—	—	28	168	190	514
Stourport —	296	2	—	—	15	—	22	41	80
Rural									
Bromsgrove —	254	84	—	—	—	—	12	625	721
Droitwich —	267	—	—	—	—	—	18	168	186
Evesham —	93	14	—	8	47	45	96	146	356
Feckenham —	104	30	—	—	—	—	32	28	90
Kidderminster —	590	68	—	—	—	—	6	64	138
Martley —	331	56	—	—	14	—	—	61	259
Pershore —	103	48	—	—	—	128	60	86	250
Rock —	79	—	—	—	—	56	—	17	17
Shipston-on-Stour —	111	—	—	—	—	—	—	7	7
Tenbury —	24	8	—	—	—	—	12	15	35
Upton-on-Severn —	26	16	26	—	—	—	—	48	90
	5529	792	147	62	253	515	1040	3862	6671

NOTE.—The figures for the parts of the Rural District of Newent, Stow-on-the-Wold, Tewkesbury and Winchcombe are not given as the information available applies to the whole of the Districts.

177. In the Malvern Urban District, Mr. H. Hillyard, the Sanitary Inspector, states that several of the larger residences have been converted into flats by private enterprise, thus providing some 50 additional dwellings.

178. Mr. Atkinson, (Evesham Rural District), says that there is now practically a complete record of houses in the District.

179. Dr. G. E. Harthan, (Evesham Borough), says in his Report for 1927 :—

“ Although new houses have been built in greater numbers each year (113 in 1927), overcrowding still exists, and condemned houses remain occupied. The former evil has been relieved in some measure, the latter not at all.

“ The condemned houses, and some others in the Borough, have survived too many generations, and are to-day disgusting anachronisms in this 20th century.”

180. It is interesting to note that in the Evesham Rural District 476 houses have been erected by the Rural District Council under the various Housing Acts, as follows :—

1910 Act.	1919 Act.	1924 Act.	Total.
146	142	188	476

181. A housing scheme has been completed for each parish in this district.

182. In his report for 1927, Mr. R. J. Atkinson, the Sanitary Inspector of this District says :—

“ If it were possible to erect houses to let at a much lower rental, it would perhaps be necessary to embark upon a further programme, as there is still a number of houses which are very defective, the occupants of which desire, and ought to have, better houses, but they cannot afford the rent of the type of house recently erected.”

183. The Housing (Rural Workers) Act may be of assistance in these cases, but owing to the restrictions upon rental and tenancy, it has its obvious limitations.

Housing (Rural Workers) Act, 1926.

184. An explanation of the provisions of this Act was given in my last Report. It was then stated that as the population in rural areas was decreasing, the question was largely one of unsuitability rather than insufficiency of houses.

185. Although over one million houses have been erected in the country since the war, only 9868 houses were completed, up to February 1928, in agricultural parishes under the 1924 Housing Act. As this number obviously included many occupiers other than agricultural workers, the need for keeping in a state of repair the cottages at present occupied by agricultural workers is imperative.

186. As a result of several months experience, I think the working of the Act has been found to be quite practicable.

187. The restrictions laid down by the Act are such that the bargain hunter will not be attracted.

188. The Act can be a valuable asset to Rural Housing, but unless Sanitary Authorities, and particularly Sanitary Officers, are energetic in advising owners of condemned or ill-conditioned cottages to apply for assistance, no forward step will be made.

189. In former years Sanitary Inspectors have informed me that many dilapidated houses are occupied by the owners, whose means are such that they cannot be pressed to improve the condition of their houses. This plea is no longer justified, and in such cases I am convinced that pressure from Sanitary Officers would result in the improvement of many Rural houses.

190. The Sanitary Officers of the Evesham, Martley, Tenbury and Pershore Rural District Councils have been very helpful in getting the Act started in their respective districts, and as no advertisement is so useful as the practical object lesson of houses renovated, I hope that the progress may be more rapid in the next twelve months.

191. The Ministry of Health expressed the opinion that the Act would benefit tenants, not landlords, and although the means of the applicant have not been considered in this County, I do not think there can be any question that the tenants will be the gainers, as in several cases landlords have not asked for any increase in rent for reconditioned houses, or have proposed to charge rentals below the maximum allowed under the Act.

192. The following notes are based upon the scheme in operation in the County of Worcestershire, where the Council were declared to be the Authority for the whole County.

193. The preliminary step was to arrange for a Conference of Local Authorities, as it was felt that co-operation represented the most hopeful method of making the Act useful. It had the further advantage that the Council had no Officer on their existing staff who could undertake any considerable number of investigations, and until the usefulness of the Act was proved it was inadvisable to appoint any new whole or part time Officer.

194. The Conference was held at Worcester at the end of August last year, so that the scheme has only been in operation a few months. Up to the 30 June 1928, applications for grants relating to 89 houses have been considered; and applications referring to 44 houses have been considered and approved, applications in respect of 15 houses were refused or withdrawn, and a further 9 are at present under consideration. The approved expenditure on grants up to date is approximately £4,000.

195. At the Conference held in August 1927, several Sanitary Authorities agreed to co-operate, and subsequently every Authority in the County agreed to assist by allowing their Officers to investigate and report on cases.

196. The County Council delegated all their powers under the Act to the Public Health and Housing Committee. A special Sub-Committee was appointed to consider applications, but as the Sub-Committee had no powers to accept or reject applications without reference to the main Committee, which only met quarterly, delay in dealing with applications, of necessity, arose. To counter this, the Public Health and Housing Committee recommended the County Council to rescind their previous motion, and the powers were then delegated to a Special Committee, termed the Housing (Rural Workers) Act Committee, composed of the original Sub-Committee of the Public Health and Housing Committee.

197. The Special Committee originally consisted of 10 members; two additional members, with special knowledge of local Housing conditions, have since been added to represent portions of the County from which it is expected applications are likely to be received. The Special Committee above mentioned is one of the strongest possible, and they have absolute powers to accept any applications without reference to any other Committee. At each quarterly meeting of the County Council they report action, and submit estimates of probable expenditure to the Finance Committee.

Propaganda.

198. Explanatory leaflets have been issued to Local Sanitary Authorities, Parish Councils, County Police Stations, and to the Worcestershire Branch of the National Farmers' Union, as well as ordinary newspaper insertions in the chief local Journals of the County.

Fees to Local Sanitary Authorities.

199. A fee of £1 1s. 0d. for the first house and 10s. 6d. for each additional house under the same roof is paid to the Local Sanitary Authority for each application reported upon by their Officer at the request of the County Council, whether the application is accepted or refused. In certain cases the Local Authorities retain this fee; in others, it is passed on to the Officer concerned. I think it would be an advantage if the local Officer had it in every case, as he is put to certain additional trouble and travelling expense.

Grants and Loans.

200. Loans, apart from grants, have not been found useful in this County; in fact, if any scheme is confined to loans apart from grants, the Act would be quite useless in this County.

201. In only one case has a loan been made, and in that case a grant was also approved, but as the applicant was a working man with no capital, the expenditure over and above the grant was covered by a loan, and the deeds of the property were endorsed. In this particular instance, the application for grant and loan was for the sum of £235. A grant was made for £100, and the balance of £135 was advanced in the form of a loan. The owner pays a fixed weekly rental of 4/6, representing interest and sinking fund charges, which will in 20 years time cease altogether, and the property will be the owner's without any restrictions.

Maximum Rents.

202. In fixing maximum rents under the Act, difficulties have been experienced in two directions:—

203. Firstly, the Agricultural Wages Act directs that where a labourer is only receiving the minimum wage, deductions for rent must not exceed the sum of 3/- per week. In such cases, where an application under the Housing (Rural Workers) Act was made, and three per cent. of the owner's capital expenditure was added to the rental, a curious position arose. The Ministry have, however, expressed the view that the two Acts are quite distinct, and that each one should be considered separately.

204. The second difficulty concerned the common practice of a rate-compounded rent. As the rates are at present, and will probably be in the future, a varying figure, the fixation of a maximum rent to include rates would be unwise. It is necessary in such cases, where during the last five years a rate-compounded rent has existed, that the Committee should first fix what is the present rent less rates, and then fix a maximum rent under the Act.

205. In certain areas I notice that a maximum agricultural rental is fixed for all districts ; this seems to me a disadvantage. In Worcestershire the rentals vary in different agricultural parishes ; for example, the skilled market gardener of the Evesham area earns a bigger wage than the ordinary farm labourer ; or again, the accommodation provided varies in different houses.

206. It is just these variations which make the personnel of the Housing (Rural Workers) Act Committee important. The Local Officer, when reporting, invariably gives his opinion of the average rental of the particular district, which is supplemented by a member of the Committee with local knowledge. To fix upon a general maximum rental would, in my opinion, destroy part of the usefulness of the Committee, and would not, in the main, operate so fairly.

207. In this County the Committee have finally decided to add a footnote to the Certificate of Approval that the " maximum weekly rental has been fixed independently of the question of rates."

Grants.

208. In the Annual Report of the Evesham Rural District for 1927, Mr. Atkinson, the Sanitary Inspector, whilst approving the action of the County Council in securing the co-operation of the District Council, states :—

" This Act ought to be beneficial, but I fail to see how it
 " is going to help us in a village like Broadway, for instance,
 " where the houses are built of stone ; because if additions
 " have to be made, they ought to be erected in stone to
 " preserve the characteristics and charm of the village
 " (which we hear so much about nowadays, and which is
 " perhaps easier to talk about than to put into effect), and the
 " expense involved by building in stone makes it impossible
 " to comply with the provision in the Act as to rent."

209. This is a point which the Housing (Rural Workers) Act Committee have considered. The type of roof tiles was altered in one case, and the fronts of old houses were preserved where brickwork would have presented an eyesore. It must, however, be admitted, that the financial limitations may present the alternative of a comfortable ugly building, or a picturesque but dark, damp and inconvenient dwelling.

210. As the amount of grant payable under the Act is dependent upon an estimate of the probable cost, it is obvious that the correctness or otherwise of the original estimate is of the greatest importance. All applicants are now asked to obtain two estimates at least if possible. Where only a single estimate is forwarded, either the County Land Agent or County Architect visits the property and reports before a grant is approved.

Supervision of work while in progress.

211. No easy solution of this difficulty has yet been found, but in cases where an Officer of the Local Sanitary Authority finds difficulty in filling in the necessary certificate, the Clerk of the Works employed by the County Architect visits from time to time while the work is in progress. This is not possible in all cases, as it would become too expensive. A certain amount of supervision must be exercised, as it should be remembered that the Council pay on estimated, not actual, expenditure.

Restrictions as to tenancy and rental, and valuation of property.

212. The valuation of property on completion of the works is one of the first points that must be understood by the Officers of Local Sanitary Authorities in issuing certificates.

213. For example, in one case property valued at £250 was improved under the Act by the addition of a new bedroom, etc., and a maximum weekly rental of 4/- was fixed under the Act. The estimated cost of the works was £250, and the property was valued (locally), when the work was completed, at £430. This valuation excluded the case as being one which could be dealt with under the Act. The Committee sent the County Land Agent to visit the property and value it, with the knowledge that restrictions as to rental and tenancy would exist. He expressed the opinion that the maximum value of the property could not exceed £230, which was £20 less than the estimated cost of the work. Although this is an extreme case, it must be clearly understood that restrictions as to maximum rental allowed to be charged must to all intents and purposes fix the value of the property, for as a rule it is unwise to assume that cottage property is worth more than 16 years, or, at the outside, 20 years' purchase.

214. Certain interesting applications have been received ; one from the owner of a barn which was converted into three good cottages, the cost of the alterations amounting to £715 19s. 10d. This application was approved and the work has been completed.

215. An application was received from a Rural District Council who possessed six condemned houses which were presented to them as a gift by the owner. Although it was decided that such an application could be received and could be accepted, the Chairman of the Special Committee, after viewing the property, and consulting the Clerk of the Council, decided that it was unwise to attempt to do anything, as the six houses would have had to be completely demolished, and only the foundations could have been used again.

216. Several applications have been received from Small Holders and owner occupiers. So far no houses have been specifically set aside for County roadmen, and no grants approved, although this has certain possibilities in Worcestershire, as such workers are of a similar economic position to the agricultural labourer.

217. Up to the 30th June 1928, grants had been given for reconditioning 44 houses, and applications in respect of 9 others were under consideration.

Mental Deficiency Acts, 1913-1927.

218. The administration of these Acts is in the hands of the Clerk of the Council. As and when required, medical or other reports are furnished to him by the Assistant County Medical Officers and the Health Visitors.

Milk and Dairies (Consolidation) Act 1915.

Milk and Dairies Order, 1926.

219. A Conference was held in Worcestershire in 1927, when the late Mr. Willis Bund presided over a meeting of representatives of Local Sanitary Authorities and members of the Worcestershire Branch of the National Farmers Union. The various sections of the Order were dealt with paragraph by paragraph. The importance of cleanliness in production and an impervious flooring to cowsheds were generally agreed upon.

220. Considerable difference of opinion existed over the question of registration, the meeting finally approving a resolution that any person who habitually produced more milk than was necessary for his own household consumption should be registered.

Clean Milk Course.

221. The Public Health and Housing Committee arranged for a course of 6 lectures and demonstrations in the production of clean milk. The course extended from 20th September to 11th October, 1927, and was attended by 21 Sanitary Inspectors. The cost of the course was guaranteed by the Public Health Committee but the fees paid by Local Sanitary Authorities covered the whole cost of the course.

222. Although Worcestershire is a county of relatively low milk output compared with adjoining counties, the fluid milk market is a very important source of farm income. Worcestershire milk goes mainly to the West Midland area centred around Birmingham; small quantities also go to London and South Wales.

223. The importance of milk to the community is equally recognised by Sanitary authorities, who are entrusted with the safeguarding of the health of the public.

224. The interests of the farmer and the health authority are not really so conflicting as would at first appear. The keeping qualities of the Milk depend on cleanliness, and as the sale is certainly influenced by keeping qualities, the wholesomeness of the Milk must be accepted by the public if the consumption per head is to be increased.

225. The so-called ordinary milk of the county is improving in quality, and much of it reaches "Grade A" standard. This improvement has been noted by the County Analyst and is particularly marked in districts where bacterial counts of ordinary milk are under-taken by Local Sanitary Authorities. By a reduction in the fee charged for bacterial counts of milk submitted by local authorities, it is hoped that more general use will be made of these tests.

Graded Milk.

226. Although the amount of graded Milk produced is very small, the influence upon the standard of ordinary milk is considerable. Clean Milk competitions indicate that "Grade A" standard can be produced by cleanly methods in very ordinary buildings. The fear of official supervision and the extra cost of the detection of cattle in the herd which react to the Tuberculin test, seem to be the main reasons why more applicants do not apply for licences to produce graded milk.

227. The extra cost of producing graded milk, including interest on capital expenditure, is given in a recent publication as between 2d. and 3d. per gallon, extra labour accounting for over half this total, whilst veterinary fees and loss on "reactors" represent only $17\frac{1}{2}$ per cent. of the total.

228. At the time of writing, five "Grade A" licences have been issued; all the producers are in the north of the County. It is curious that the demand in such a town as Malvern, where numerous schools are situated, has not resulted in some producers supplying graded milk. No supply of graded milk for the Malvern Open Air School could be obtained. I do not think there is any doubt that most of the producers could without difficulty produce such milk, but it is a question of competition as a rule, for when one licence is granted, others follow.

229. The Milk from each farm registered for the production of Grade A Milk in Worcestershire is examined quarterly to see that the bacterial standard is maintained, and a quarterly inspection of the herds is also made by a veterinary surgeon. In addition inoculation tests to exclude the possibility of tuberculosis are undertaken from time to time.

230. No routine inspection of dairy herds has been undertaken. About one hundred samples of milk were examined by guinea pig tests in 1927; these included a certain number of samples of milk retailed in Worcestershire, but some were in connection with the following up of complaints as to infected milk consumed outside the county.

231. Four complaints were received from Birmingham Corporation; in three instances the affected animals were discovered and slaughtered under the Tuberculosis Order, 1925.

232. Two complaints were received from the London County Council; both were followed up and cows suffering from septic conditions of the udders were withdrawn from the herd until certified to be fit.

233. One complaint was received from Staffordshire, but all the cows on the Worcestershire farm appeared healthy; it was found that Milk was bought by the farm from an adjoining producer in the Birmingham area. It was subsequently found that the Milk from the Birmingham area was infected; this was undoubtedly the origin of the complaint.

234. Tubercle Bacilli were discovered in one sample of Milk which was being retailed in Worcestershire. The offending cows could not be traced as the farmer changed his herd every few weeks, and numerous alterations had occurred before it was possible to visit the farm. It is almost impossible to trace cows in some of these farms, adjoining towns, where the herd is solely comprised of milkers; for as the cows dry off they are sold and replaced by others in milk.

235. The investigation of all cases, or suspected cases, of Tuberculosis in Dairy cattle is made by District Veterinary Inspectors (who are also appointed to act under the Tuberculosis Order). All tests, biological and bacterial, are made in the County Laboratory. It is hoped that some extension of the premises used for the Laboratory's guinea pigs will be provided, so that it will then be possible to increase the number of biological tests undertaken.

Treatment of Cripples.

236. The following are the arrangements in the County for the treatment of cripples at the present time :

Institutional Treatment.

237. The following is a list of the Institutions to which cases are sent and the cost, viz. :—

- (a) Birmingham Royal Cripples Hospital :
 Woodlands (bed cases) 50s. per week.
 Forelands (convalescent cases) 42s. per week.
- (b) Worcester General Infirmary :
 52s. 6d. per week, adults.
 45s. 6d. ,, children.
- (c) Shropshire Orthopaedic Hospital :
 52s. 6d. per week, adults.
 49s. 6d. ,, children.
- (d) Kidderminster General Hospital :
 52s. 6d. per week.
 Tuberculosis cases only and limited to £100 per year.
- (e) St. Gerard's, Coleshill.:
 52s. 6d. per week.
 Including splints, boots, calipers and leather jackets.
- (f) Birmingham Queen's Hospital :
 15s. 0d. per week.
 Tuberculosis cases only.

238. Most of the cases are treated by the Birmingham Royal Cripples Hospital. The co-operation between the Committee of that Hospital and the Council is of a very complete character and as the Council have now reserved twelve Beds at Woodlands for a period of twenty years the treatment of a large number of Cripples in the North of the County is assured. To ensure the reservation of these 12 Beds for County cases an additional sum of 5/- per head per week will be paid from the 1st July 1928. The numbers of cases sent to the remaining Institutions are comparatively few.

Out-Patient and After-Care.

(a) Stourbridge After-Care Clinic. 40, New Road.

Thursdays at 9.30 a.m.

Rent, heating and lighting :

October to March, 7s. 6d. per session.

April to September 5s. 0d. per session.

Orthopaedic Surgeon—Mr. Naughton Dunn.

Fees—£3 3s. 0d. per session of 30—40 cases and travelling expenses. 12 sessions per year.

Nurses—Miss Mostaert, Superintendent.

Proportion of £300 per year as required and travelling expenses.

Miss Dunkley, Assistant Superintendent.

One half-day per week at rate of £200 per year and expenses.

Miss Shakespear, Assistant Superintendent.

One half day per week at rate of £180 per year and expenses.

(b) Redditch After-Care Clinic. Drill Hall.

Mondays at 2.0 p.m.

Rent, heating and lighting :

October to March — — 4s. 6d. per session.

April to September — — 3s. 6d. „

Cleaning — — — 2s. 6d. „

Orthopaedic Surgeon—Mr. Naughton Dunn.

Fees—£3 3s. 0d. per session of 30—40 cases and travelling expenses, about 6 sessions per year.

Nurses. As at Stourbridge.

(c) Birmingham Royal Cripples Hospital. Out-patient Dept.

2s. 6d. per attendance.

2s. 6d. per attendance for massage.

(d) Worcester General Infirmary. Out-patient Department.

2s. 6d. per attendance.

Surveys by Orthopaedic Surgeon—Mr. Norman Duggan.

Fees—£3 3s. 0d. per session, about six times yearly.

- (c) Orthopaedic Nurse for Worcester and South of County. Miss O. M. Woods. Appointed by the Worcester Voluntary Association for Mental and Physical Welfare. Salary £250 per annum and expenses estimated at £100 per annum. County Council proportion—£170 per annum.

239. This Nurse visits all the Cripples in the South of the County and not only supervises progress but gives practical help to the children.

240 Arrangements have been made with the Worcester Infirmary (and are under consideration with the Birmingham Royal Cripples Hospital) for a reduction in the charges to the Council where patients or parents are contributors to the Hospital Voluntary Contribution Schemes.

Cost of Scheme.

241. The estimated cost of the complete Scheme for 1928-29 is £3,575.

242. This amount is allocated to the three Committees concerned as under, viz. :—

Tuberculosis	—	—	—	£ 2,400
Administrative Health	—	—	—	400
Education	—	—	—	775
				£3,575

Parents Contributions.

243. Parents show readiness to contribute towards the cost of treatment.

244. In other branches of the Council's work the cost of collection is considerable but under the Cripples Scheme the money is collected at the Clinics or deducted from the accounts by the Hospital Authorities without the need for any official collectors being employed.

245. The patient's card bears record of the amount collected on a specific date and the Birmingham Royal Cripples Hospital keep details of each patient making contributions. This double check appears adequate and suitable.

246. The parental contribution system briefly is as under :—

In-Patient Treatment.

247. The following Scale approved by the Committee is used as a basis to determine the amount of the contribution, which is sent direct by the parents to the Birmingham Royal Cripples Hospital and a deduction of any such sum is made from the account rendered to the Council.

Weekly income after deducting 5/- for each child under 14.						per week.
Under	£1	10	0	—	—	— Nil.
£1	10	0	and under	£2	0	0 — 1/6
£2	0	0	„ „	£2	10	0 — 2/6
£2	10	0	„ „	£3	0	0 — 5/-
£3	0	0	„ „	£3	10	0 — 7/6
£3	10	0	and over	—	—	— 10/-

Out-Patient Treatment.

248. The contributions made in respect of Out-patient treatment are handed to the nurses of the Birmingham Royal Cripples Hospital at the After-Care Centres ; generally speaking the sum of sixpence per week is paid towards plasters, splints, boots etc. This sum is deducted quarterly from the account sent to the Council.

249. An amount of approximately £40 has been collected by the Birmingham Royal Cripples Hospital during the year 1927.

250. No 6d. weekly contributions are collected at Worcester Clinic, as practically all patients have to pay their travelling expenses to and from the Clinic. The same remark applies to the Out-patient Department at Broad Street, Birmingham.

251. The basis of the Scheme is to use existing Hospitals with Specialist Orthopaedic Staff for In-patients treatment, and to develop After-Care Centres at convenient points in the County or utilise existing out-patients departments for the same purpose.

252. Although it is not suggested that all crippled cases throughout the County requiring treatment are now dealt with, the modified "County Scheme" at present in use does cover every portion of the County. A review of the work undertaken in 1927 will be found in pages 17 to 22 of the School Report of 1927.

253. The attached table gives the expenditure under the various headings for the year 1927,

*Expenditure during 1927.**In-patient treatment.*

	Fees for all cases of non- pulmonary Tuberculosis.	Fees for Cripples other than Tuberculous.		Total.
	£	£	£	£
		School Children.	Infants.	
Birmingham Royal Cripples Hospital	1439	251	157	1847
Birmingham Queen's Hospital	— 5	—	—	5
Shropshire Orthopaedic Hospital	— 240	—	—	240
Kidderminster Hospital	— 60	—	—	60
Heatherwood Hospital	— 37	—	—	37
St. Gerard's, Coleshill	— 27	143	—	170
Worcester Infirmary	— 47	8	—	55
	1855	402	157	2414

Out-patient treatment.

Stourbridge & Redditch Clinics	—	33	145	72	250
Worcester Clinic	—	10	57	2	69
Orthopaedic Nurse	—	9	45	26	80
Broad Street Clinic	—	48	23	43	114
		100	270	143	513
Grand Totals	—	1955	672	300	2927
Less Contributions	—	6	23	18	47
		1949	649	282	2880

254. For this expenditure, the Council is, I am convinced, doing work which will restore to the ranks of workers individuals who without such treatment would never be self supporting but would be a burden to the rates.

Hop Pickers.

255. For some years past, extracts from the Reports of Local Medical Officers of Health have been given in the County Report, but last Autumn I personally inspected 30 farms in the Martley and Tenbury Rural Districts.

256. Owing to the weather conditions being particularly bad, many defects were noted which, in an ordinary year, would not have been so apparent.

Sleeping Accommodation.

257. Barns, sheds, lofts and barracks form the main accommodation for the hop-pickers.

258. Before occupation the premises were all white washed and cleaned. The buildings were, as a general rule, weather proof.

259. The Bye-Laws of the Tenbury Rural District Council are such that every picker sleeps off the ground upon wood ; where no wooden floor exists, a gate, a wooden bed frame or a series of logs were used, and ample straw supplied.

260. The most unsatisfactory quarters I visited were in the Martley Rural District, where some pickers were accommodated in bell tents ; no floor boards were supplied, and the ground in question was clayey in nature. Some of the tents had been given up by the pickers, who found accommodation in quarters which had not been prepared for use.

261. Generally speaking, the accommodation in the Martley District, although reasonable, is not so good as in the Tenbury District. The better conditions in Tenbury are accounted for by the simplicity and brevity of the bye laws, which are generally known and adhered to.

262. In no case did I notice any gross overcrowding. This is partly accounted for by the smaller number of pickers employed. The separation of the sexes in certain instances presents considerable difficulty. The single men were accommodated separately, and in no instance did I get a single complaint of any trouble in this direction ; but in certain of the larger barracks and barns, no separation between individual families had been provided for. On some farms accommodation for married families is separate, and the larger barns are used for women and children only. The influx of week-end visitors is likely to disturb the best arrangements made, and it seems difficult to make any suggestion which would overcome this difficulty.

Cooking.

263. Cook-houses or improvised farm sheds generally appeared adequate. I was struck by the curious likes and dislikes of the pickers, for in some instances what appeared to be convenient and adequate cooking sheds were unused, whilst a small adjoining open shed was extremely popular ; others prefer to cook in the open although a shed is provided.

Privies.

264. The sanitary arrangements for the hop fields present an extraordinary contrast. At certain farms the privy accommodation was extremely bad. A seat and a wooden shelter appeared to have been put down in a field, and very little else done afterwards.

265. Pickers in several instances had every excuse for not using the privy, for not only was the approach muddy, but the smell and surroundings were often disgusting.

266. On one farm visited, buckets were in use, and the experiment appeared to be absolutely satisfactory. The buckets and seats were clean, and the surroundings were such as would have been approved of in any army camp.

267. Another system in use was a series of seats over a concrete channel which was cleaned out daily, and faecal matter collected in a pit at the end of the channel. This was reasonably satisfactory, but not so good as the buckets.

268. Another type of latrine was a wooden frame work seat over a narrow trench; if well looked after, this method appeared to be quite satisfactory for adult males.

269. I would emphasize the importance of having some person whose duty it is to look after these privy latrines upon every farm where any considerable number of pickers is employed, for without such attendance no privy system will ever be a success.

270. The site of the latrines should be carefully chosen. In one case the latrines had been erected adjoining the cookhouse, whilst in another case they had been erected near a stream. In the latter instance, I have very little doubt that this stream caused the infection of the drinking water supply in a well which supplied the pickers, and caused quite a severe outbreak of diarrhoea. In a third instance, the latrines had been erected directly over a clean stream, the faecal matter entering this stream without any treatment. This is, in my opinion, a most unsatisfactory and objectionable procedure.

271. The actual approach to these latrines was so muddy and wet that it did not appear to be used much by the pickers.

Water Supplies.

272. As a general rule the arrangements were satisfactory, but in two instances difficulties had arisen.

273. In one case a well had become infected by faecal contamination. This was the case mentioned previously. When the drinking water supply was changed, no further diarrhoea occurred.

274. In the second case, a pump supplying a large barracks for 135 pickers (accommodation for 400) was out of order. It had been repaired a few days before, and was again out of order. The pickers had no drinking water, except from the River Teme. The River, on the day of my visit, was partly in flood, and the water was unsuitable even for making tea. No other water supply was provided, and no person appeared to be looking after the camp.

General surroundings and Scavenging.

275. At some of the large farms the arrangements for keeping the surroundings clean and tidy appeared to be adequate, but on others no efforts in this direction appeared to have been made.

276. Where receptacles for rubbish were provided, pickers appeared to be using them.

277. On large premises it is absolutely essential for the general good that someone should be in charge of the general cleanliness of huts, yards and the latrine accommodation.

288. On the farms where such a person is employed, the results are as a general rule quite satisfactory, and, in certain cases, extraordinarily good.

General Health of the Pickers.

289. Owing to the unsatisfactory weather in 1927, colds, sore throats and diarrhoea were rather prevalent.

290. On one farm a single case of measles had arisen; on another diarrhoea was very prevalent. On the day I visited this latter farm, I was informed that almost half the pickers had had diarrhoea, that at least a dozen were ill in the quarters, and that a similar number had returned home.

291. On examination, several of these people showed signs of being quite ill. Under the circumstances, I thought it more important to investigate the cause of this illness than to continue my intended inspection for that day.

292. Samples of the well water were taken, and submitted to the County Analyst. Samples of the blood, urine and faeces from patients were also taken to exclude the possibility of epidemic disease.

293. The owner of the farm in question was seen by the Sanitary Inspector, and arrangements were made for an alternative water supply to be made available, and for this particular pump to be labelled to indicate that the water was unsuitable for drinking purposes. At a visit paid to this farm a few days later, I was informed that no fresh cases had arisen and, except for cases who had returned home, all the others appeared to have recovered.

294. One of the difficulties of the pickers on this farm was in obtaining fresh milk for sick people. In the majority of cases they were relying on tinned milk.

295. The standard of accommodation on some of the Worcestershire farms is high. Where the quarters are good, the pickers will come again. One picker had paid 47 consecutive visits, and on the same farm several others had come for over 20 consecutive years.

296. Whilst it is true the quarters for pickers have improved much of recent years, I think the social status of the picker has also improved, and hop picking for many represents the equivalent of the seaside holiday, rather than a means of earning money. This type of picker will respond to better and more cleanly surroundings when provided.

297. A few years ago the hop fields were associated with verminous and lousy conditions. From personal visits to a large number of quarters, and also from the examination of several persons, I am satisfied there is great improvement in this direction. In 1926, the School Nurse of one of the districts in the North of the County told me that when the schools re-opened, the children from her area who went hop picking were no more verminous than those who remained at home.

298. On the better type of farms, the following are some of the amenities provided, viz. :—Unlimited hot water, clothes dried at night in the hop kilns, a daily ration of soup, trestled beds and chaff mattresses, dining rooms, concrete paths to quarters and canteens.

299. The standard aimed at already exists on many farms. Deficiencies in those below the average could be improved in the following ways :—

1. The practice of employing a nurse to visit each farm daily is an important safe-guard. This procedure has been given up on several farms, and certainly in going round it appeared that no regular visits at stated hours were paid to certain farms. Minor ailments always exist, and major ailments want detecting early.

2. I think the Local Sanitary Authority should be informed of any condition which appears adversely to affect the health of the pickers, although the ailment may not come within the category of notifiable infectious disease. If the employer was asked to inform the Local Sanitary Authority of all cases returning to their homes on account of illness, and to state the nature of the illness, it would be an important safeguard. That some such procedure is necessary is clear when it is realised that on one farm an outbreak of diarrhoea had existed for 10 days and the Local Authority had received no intimation. In this instance I was informed that a dozen people had returned to their homes. Diseases of the Typhoid family might easily be spread in this way, and the Sanitary Administration of an area should aim at preventing any such possibility.

3. Improved *supervision* of the latrines and general scavenging arrangements. This is the most general fault, and one where there is room for much improvement. In any Military Camp where similar latrine accommodation is in use, a Sanitary Orderly is invariably in charge; this is equally important in a civilian camp. The absence of food stores and the crowding together of large numbers of pickers make the general cleanliness of the surroundings of great importance to the health of the camp. This general supervision should also apply to water supplies, as where possibly as many as 300 or 400 pickers may depend on a single pump as a supply, children or adults may easily get the pump out of order. I saw one primed with filthy muddy water, which would foul the whole supply.

A last point under the heading of supervision concerns lighting. Where many people are in lofts with poor access, the risk of fire should always be considered. On most farms a fixed individual lights the lamp, which burns all night, and is not touched by anyone else. This should be insisted on, and further, the lamp should be hung from a suitable place where there is no risk of burning a beam. Where access, as in certain cases, is obtained only through a trap door and ladder, one can realise the awful results which would follow a fire.

The defects noted were all passed to the Local Sanitary Authorities for action.

Blind Persons Act 1920.

300. As the Council's Scheme which is reasonably complete, has been given in detail in previous reports, I do not propose to restate the provisions.

301. The troublesome definition of a blind person has come nearer to a solution, and the Council have provided a formal certificate which will be obtained by the County Association in all cases where a blind person is assisted by them financially.

302. A second Home Teacher was appointed by the Worcester-shire Association for the Blind in 1927, but she afterwards left to take up another appointment. The vacancy has now been filled.

Prevention of Blindness.

303. A very close watch is kept on cases of infants with discharging eyes and this vigilance is being rewarded by a lessening of the number of children requiring education in Schools for the Blind.

304. 24 cases of squint in school children received operative treatment in 1927.

Smoke Abatement.

305. A Midland Joint Advisory Council for Smoke Abatement has been formed, upon which the County Council is represented.

306. This body has appointed an Executive Committee to make representations as to the co-ordination of preventive efforts with a view to the adoption of a uniform scale for black smoke emission.

Town Planning.

307. A Joint Town Planning Committee is being formed by representatives of the City of Worcester and neighbouring authorities.

308. The Oldbury Urban District Council has adopted a Town Planning Scheme. The Malvern Urban District Council is preparing a Scheme in conjunction with the Upton Rural District Council, as the area to be town planned includes a large part of the latter Authority's district.

Sanitation.

309. The drainage, water supply and scavenging of Pershore continue to be thoroughly unsatisfactory. Representations have been made to the Ministry, but no further action can at present be taken by the County Council.

310. A recent report disclosed the deplorable condition existing in certain Pershore houses where the faecal contents from privies are wheeled through the living rooms of the house ; this should not be allowed to continue.

Drainage and Sewerage.

Malvern.

311. Dr. Mitchell states :—

“ A small plant was erected in the Malvern Wells district,
“ to take the sewerage of some 30 new houses and is working
“ satisfactorily.”

Bromsgrove Urban.

312. Dr. Cochrane says :—

“ The district, an old town, suffers from the disadvantage of
“ its main drainage system being old.”

He goes on to say that

“ The Council should aim at the speedy installation of a
“ complete water carriage system.”

313. The Sanitary Inspector of this District (Mr. Burford) states
“ a large number of open type privies have been abolished
“ and water closets provided. It is satisfactory to note that
“ owners do not require a great deal of pressure to convert
“ the privies to W.C.'s., the tendency being rather to wait
“ until a notice is served than to take the initiative them-
“ selves.”

314. The inadequacy of the Bromsgrove Sewage Works and Farm to cope with the requirements of the present population, was referred to by Dr. Cameron Kidd in his reports for a number of years. Dr. Cochrane again mentions this deficiency, and expresses what, in my opinion, is a very sound view that the District Council should seriously consider the Salwarpe Valley Scheme. This joint Drainage Scheme has been talked of for a long time, and as it concerns at least four local authorities, some action to bring concrete proposals before these authorities seems very necessary. Until such a scheme is adopted or rejected, no pressure can be reasonably brought upon any authority to deal with local problems, although the need for some action is both necessary and pressing.

Evesham Rural.

315. The Sanitary Inspector (Mr. Atkinson) expresses the opinion that extension of sewers to Station Road, Broadway, is necessary, as the drainage discharges into the roadside ditch.

Halesowen Urban.

316. Dr. Brett Young mentions in his report the fact that 1044 privy middens still exist. The privy is objectionable in a country area, but in an urban district it is an abomination. I hope that conversion work will be pressed with the utmost vigour by the Halesowen Urban District as this sanitary improvement is long overdue.

Stourport Urban District.

317. Dr. Stanley Robinson refers to the unsatisfactory Bungalow area, which he is making the subject of a special report to the District Council.

Meat Regulations 1924.*Meat Inspection.*

318. This is a very important health measure carried out by Local Sanitary Authorities.

319. The amount of time given to these duties will mainly depend upon the staff available, but it is probable from the results recorded that there must be considerable variation in these activities in different districts. For example, in Stourbridge, Kidderminster and Oldbury, the amount of meat seized and condemned is considerable, whilst in others it appears to be negligible. It seems unlikely that such variation in the meat supplies can account for the different results. The position of adjoining areas where different standards of Meat Inspection are in operation is unsatisfactory, not only from a health point of view, but also to Meat Purveyors.

320. The following particulars of meat condemned are taken from the Annual Reports of Medical Officers of Health :—

Kidderminster Borough.

321. 3 beasts, 7 pigs, 2 sheep, 1 hare, 6 rabbits, 84 lbs. of bacon, and other articles bringing the amount condemned up to 4 tons. 14 cwt. 92 lbs.

Lye and Wollescote.

322. 4 cwt. of potatoes were surrendered as unfit for human food.

Malvern.

323. 187 lbs. of beef, 1 pig, 208 lbs. of bacon, 112 lbs. of grapes, 540 samples of preserved food.

Oldbury.

324. 1377 $\frac{1}{4}$ lbs. of meat destroyed.

Redditch.

325. 1 beast, 1 pig, and the organs of other animals amounting in all to 16 cwt.

Stourbridge.

326. 21 $\frac{1}{2}$ cwts. of meat.

Evesham Borough.

327. 9 cwts. of meat.

Halesowen.

328. 1 cow's head, liver and intestines, 1 pig's lungs and intestines.

Stourport Urban.

329. 18 lbs.

Bromsgrove Urban.

330. 54 lbs.

331. The above figures refer to the year 1926, as only certain of the reports for 1927 are to hand.

332. Dr. Mitchell (Malvern Urban District) in his Report for 1927 says :

“ *Meat.*—The 10 registered slaughter-houses have been
“ inspected by myself and your Sanitary Inspector through-
“ out the year. Affairs remain much as before, and owing
“ to the scattered nature of the District, thorough meat
“ inspection is an impossibility with our present staff.”

333. The Halesowen Urban District Report for last year states that $1\frac{1}{2}$ lbs. of meat was unfit for consumption and was destroyed.

Evesham Borough (1927).

334. 8 surrenders amounting to 187 lbs.

335.
Kidderminster Borough (1927).

336. Nearly $2\frac{1}{2}$ tons of meat were destroyed as unfit for consumption.

Water Supplies.

337. Dr. Sanders Green (Martley Rural District) states :

“ Samples of water were taken from most of the wells
“ at Areley Kings and in nearly all cases the Analyst’s
“ Report stated ‘ that the water was not of good quality
“ and could not be recommended for drinking purposes.’
“ Meetings were held at Areley Kings and the matter gone
“ into to see if conditions could be improved. The best
“ way was found to be if water could be obtained from the
“ Stourport and Bewdley authorities. So far nothing has
“ resulted. A few houses obtain water from the Stourport
“ District Water Supply.”

Pershore Water Supply.

338. There is no progress to report.

Kidderminster Rural District.

339. Chaddesley Corbett Village.—No further action has been taken, but samples of water are to be examined as it is thought the removal of rubbish from the collecting areas may have improved the supply.

River Pollution.

River Severn.

340. A conference of Medical Officers of Health, convened by the Ministry of Agriculture and Fisheries, was held at Worcester in June 1927 to discuss a survey of the River Severn, together with a report by Mr. C. C. Duncan, the County Analyst.

341. Considerable improvement has resulted in the state of the river at Worcester by reason of recent developments at the Worcester City Sewage Works.

342. Dr. Miles (Bewdley Borough) states :—

“ The sewers discharge into the River Severn, but there
 “ is no serious pollution. The condition of the River
 “ bank on Severn Side South is very unsatisfactory.
 “ Several house drains open independently under the
 “ more or less ruined quay wall, and form pools of sewage
 “ when the river is low, which are a menace to the children
 “ when playing on the River bank, and most objectionable
 “ to visitors and others sitting there.”

343. The River Severn is used for public water supplies further down the river. It is most unsatisfactory that crude untreated sewage from Bewdley and part of the Parish of Wribbenhall enters the river, even although the dilution may appear to be sufficient to prevent damage to fish life.

344. A Rivers Committee, composed of representatives of Local Authorities in the watershed of the Stour, has been constituted. No expenditure in this connection will be borne by the County Council.

345. The effluent from the Kidderminster Sugar Beet Factory has been found to be less satisfactory than formerly and the necessity of improvement in this respect has been pointed out to the Company.

River Arrow.

346. In company with the County Analyst, I made an inspection of this river. No gross contamination was detected on the day of our visit.

River Tame.

347. This river receives the effluent from the Oldbury Sewage Works.

348. Dr. Sharpley the Medical Officer of Health of the Oldbury Urban District, states :—

“ The present Sewage Works are not large enough to
 “ efficiently deal with the sewage of the district. There
 “ has been in the past great difficulty in dealing with the
 “ Oldbury sewage, which included a large amount of
 “ chemical wastes. This difficulty, however, has been met
 “ by treating the chemical works effluent prior to discharge
 “ into the sewers, but even now the question of sewage
 “ treatment is one of the problems which the Council has to
 “ face.”

Sale of Food and Drugs Acts.

349. Information as to the administration of these Acts is given in the very complete Annual Report prepared by the County Analyst and Bacteriologist.

Education in Health.

350. This subject was mentioned in my Report for 1926. During 1927 some progress has been made.

351. The Education of the public in Health matters can be roughly divided into three main channels.

(a) *The family doctor*—who has access to the home in times of illness, and whose influence should be enormous.

(b) *The School*:—The Teacher has unrivalled opportunities. The periodical “Better Health” reaches every school in the County.

The sanitary conditions of every School are being reported on, as a clean and healthy school represents the first practical lesson in Hygiene.

(c) *The Health Visitors District Nurses and Midwives*.—Information must reach the right person. I know of no persons more likely to convey useful information than nurses.

352. *Venereal Disease* can be recognised by a Nurse when approached by her patient and she should be familiar with all the County arrangements for obtaining treatment. Lectures to Midwives have been held and were well attended.

353. Dr. Brett Young comments in his Annual Report on the need for Nurses to persuade Mothers to attempt and continue to breast feed their babies. Lectures are being arranged for Midwives and District Nurses on this subject.

354. Dr. Coaker, in his Report to the Bromsgrove Rural District Council, says with regard to cancer:—

“Patients should not refrain from early examination for
“fear of cancer but should be encouraged by every means
“to consult their doctor as soon as symptoms arise. The
“axiom that was applied to Tuberculosis some years ago
“is much applicable to cancer.”

355. Mothers attending Welfare Centres present a suitable audience to which to convey this information. The subject of cancer, with special reference to Breast Cancer is included in the " Talks to Mothers " at every County Welfare Centre.

356. The Public Health Committee have allowed Health Visitors to give lectures on health subjects to Womens Institutes. Twelve are given each year in the afternoons and additional lectures may be given by the Health Visitors, in the evenings in their own time if they care to do so.

357. The " Baby Weeks " and Mothercraft competitions represent spasmodic efforts which do good. These efforts are more showy and exciting, but they cannot replace that steady effort which should continue week in and week out, by Nurses, Doctors and others to improve the home surroundings and individual habits of those whom they have an opportunity of influencing.

358. Before concluding I wish to express my thanks to the Medical Officers, and Nursing and Clerical Staff for the loyal assistance they have given me in carrying out the routine and new duties in what has been a very busy year.

Your obedient Servant,

WYNDHAM PARKER, M.C.,

M.B., Ch.B. (Edin.) D.P.H. (Lond.)

County Medical Officer.

Public Health Department,
29 Foregate Street,
Worcester.

July 1928.

WORCESTERSHIRE COUNTY COUNCIL.

REPORT OF CHIEF TUBERCULOSIS OFFICER FOR THE YEAR 1927.

Staff.

The arrangement which was started last year whereby the whole of the Tuberculosis work in the Northern part of the County (excepting Stourbridge) is undertaken by one whole-time Tuberculosis Officer is working quite satisfactorily. Dr. H. Midgley Turner was appointed for this work in March 1927.

. There are certain definite advantages in employing a Doctor who is devoting his whole time to this work, but in the less densely populated areas, the amount of travelling entailed in proportion to the amount of work to be done, would make it an uneconomic proposition. Consequently in the more rural areas of the southern part of the County the old arrangement of combining the Tuberculosis work with the other duties of the Assistant County Medical Officer has been adhered to.

. Table VII. shows the areas with the addresses of the Dispensaries and the hours of attendance of each Doctor.

Notifications.

. Tables I. and II. set out the notifications received during 1927.

. The number of notifications has remained practically stationary since 1922, that for 1927 being just equal to the average for this six years.

TABLE I.
Notifications of Tuberculosis during 1927 showing Age Periods.

Age periods :	under 1 yr.	1-4 (4 yrs.)	5-9 (5 yrs.)	10-14 (5 yrs.)	15-19 (5 yrs.)	20-24 (5 yrs.)	25-34 (10 yrs.)	35-44 (10 yrs.)	45-54 (10 yrs.)	55-64 (10 yrs.)	65 and up- wards	Total.
Pulmonary---												
Males	-	1	10	8	14	24	35	25	21	9	1	148
Females	-	1	2	7	25	30	39	34	20	6	1	165
Non-pulmonary---												
Males	-	8	16	7	8	4	9	3	-	3	-	61
Females	-	11	10	5	9	4	8	6	2	1	-	56
Total -	3	21	38	27	56	62	91	68	43	19	2	430

Notifications of all cases of Tuberculosis shown in Sanitary Areas.

District.	Total cases notified 1927.	Population. 1927.	Notification Rate per 1,000 of Population.										Death rates.	
			1919	1920	1921	1922	1923	1924	1925	1926	1927	1926	1927	
Bewdley Borough	6	2612	1.8	4.4	—	0.7	1.1	0.8	3.1	3.9	2.3	1.2	.8	
Bromsgrove Urban	12	9766	1.5	1.9	0.6	0.8	1.5	1.1	1.2	0.5	1.2	.4	.6	
North Urban	11	9119	1.4	1.9	0.5	1.5	0.7	0.8	1.0	0.7	1.2	.7	.5	
Droitwich Borough	4	3934	1.5	2.8	1.5	1.02	1.5	1.5	1.3	1.0	1.0	.5	1.0	
Evesham Borough	21	8541	3.7	2.6	3.0	1.8	2.3	1.6	1.0	1.6	2.5	.8	1.0	
Halesowen Urban	31	29510	1.8	1.8	1.5	1.0	1.0	1.2	0.9	1.6	1.0	.6	1.2	
Kidderminster Borough	64	27220	2.2	2.1	1.6	1.2	2.1	2.6	1.2	2.2	2.3	1.1	0.8	
Lye and Wollescote Urban	20	11570	2.6	1.4	1.7	1.6	1.3	1.6	1.4	2.2	1.7	1.1	1.5	
Malvern Urban	10	17090	3.0	2.8	1.0	0.4	1.3	1.3	0.8	1.1	0.6	.5	.7	
Oldbury Urban	64	43120	2.1	1.9	1.6	1.9	1.8	1.6	1.2	1.1	1.5	.8	.7	
Redditch Urban	29	16570	2.5	2.0	2.6	2.04	1.5	1.4	1.4	1.3	1.7	.4	1.1	
Stourbridge Borough	21	18860	3.0	2.3	1.6	1.5	1.8	0.8	1.4	1.3	1.1	.7	.7	
Stourport Urban	9	5088	2.3	1.6	1.5	1.2	1.6	1.8	1.2	1.6	1.8	1.0	1.0	
Bromsgrove Rural	19	18640	0.8	0.2	0.7	0.4	0.75	0.7	1.1	0.8	1.0	.6	.8	
Droitwich Rural	9	11810	0.8	1.1	1.3	0.6	1.1	1.3	1.6	0.6	0.8	.5	1.1	
Evesham Rural	10	10520	2.2	2.1	1.9	1.02	1.3	1.7	1.6	1.3	0.9	.6	0.8	
Feckenham Rural	4	5350	1.7	2.8	3.3	1.5	1.1	0.9	0.5	0.7	0.7	.2	.2	
Kidderminster Rural	10	7661	0.4	0.4	0.4	1.5	1.4	1.3	0.9	2.6	1.3	.5	.7	
Martley Rural	10	12410	2.8	1.9	2.0	1.5	1.6	1.4	1.6	1.7	0.8	1.2	.9	
Newent (part) Rural	2	1032	0.9	0.9	1.9	1.0	1.0	2.0	2.0	1.9	1.9	1.0	1.9	
Pershore Rural	22	13080	1.9	1.8	1.6	1.5	1.3	1.0	1.5	2.9	1.7	.5	.6	
Rock Rural	6	2242	1.9	1.9	0.9	0.5	0.9	0.5	0.9	0.4	2.7	.5	.9	
Shipston-on-Stour Rural	4	4387	1.2	0.2	0.7	0.5	1.4	0.5	0.7	0.2	0.9	.2	.2	
Stow-on-the-Wold (part) Rural	—	258	3.6	—	—	—	3.6	3.7	—	0.4	—	—	—	
Tenbury Rural	7	4315	1.9	1.7	—	0.7	0.7	2.0	1.4	0.7	1.6	.7	.9	
Tewkesbury (part) Rural	3	2089	2.7	0.9	1.9	1.41	1.4	1.9	0.9	—	1.4	.4	.5	
Upton-on-Severn Rural	22	13500	6.5	1.8	3.0	2.24	2.3	1.7	2.2	1.3	1.6	1.0	1.1	
Winchcombe (part) Rural	—	106	—	—	—	—	—	—	—	—	—	—	—	
	430	310400	2.2	1.83	1.56	1.3	1.49	1.4	1.3	1.4	1.4	.7	.86	

Deaths.

. The numbers of deaths reported by the Registrar-General for the year were :

Pulmonary	-	-	-	215
Non-Pulmonary	-	-	-	52
				267

. It seems disappointing that after congratulating ourselves on the big drop in the number of deaths in 1926, i.e. 177 pulmonary against 223 in 1925, it should again have risen to 215 in 1927. Apart from the abnormal figure in 1926 we should have felt this number (215 in 1927) was not unsatisfactory.

TABLE III.

Year.	Notifications. all forms.	Deaths.* all forms.	Pulmonary Death Rate per 100 of population.
1913	889	270	0.66
1914	707	290	0.72
1915	661	275	0.74
1916	562	307	0.88
1917	671	315	1.02
1918	815	365	1.15
1919	657	320	0.85
1920	537	302	0.8
1921	471	274	0.74
1922	389	299	0.78
1923	456	262	0.68
1924	440	270	0.69
1925	386	260	0.72
1926	437	220	0.57
1927	430	267	0.69

*As obtained from the Registrar General's return.

. It is interesting to note that of 215 pulmonary deaths during the year, 76 (or 35%) were of new 1927 notifications. 48 of these (22% of the total pulmonary deaths) occurred within three months of notification. This shows that in roughly a quarter of the cases notified in 1927, the disease was so advanced that no treatment could have been of any practical value. Of these 48 cases, 10 were admitted to one of our Institutions for isolation purposes.

. As the death rate from Tuberculosis in the Borough of Kidderminster is above the rate for the County, and tends to increase, some enquiries into the possible cause were made during 1927. In these enquiries your Officers received the co-operation of the local Medical Officer of Health (Dr. J. R. Craig) and the Sanitary Inspector (Mr. J. C. Cowderoy).

Non-Pulmonary Tuberculosis.

. An investigation of the milk supply gave no indication that the milk supply of the Borough was causal of the increased non-pulmonary notification rate.

. At Post-mortem examinations, scars of quiescent tubercle are found in many individuals who showed no evidence of tuberculosis during life, and although it is not disputed that the cases operated upon for other conditions may present definite evidence of tuberculosis, it is probable that such cases are not generally notified as tuberculosis, and the fact that they have been so notified in Kidderminster Borough appears to be the main cause of the increased incidence of Non-Pulmonary tuberculosis in Kidderminster and District.

. 22 of the 26 cases enquired into were connected with abdominal operations where evidence of appendicular disease was present.

Pulmonary Tuberculosis.

. A comparison of the Kidderminster Borough death rate with those of the large Urban County areas is unfavourable to the Borough, and even over a period of 25 years the decrease is very slight.

. The following is a Summary of the conclusions arrived at, viz.:

. More females than males appear to die from pulmonary tuberculosis in Kidderminster. This is especially so between the ages of 15—25 and to a lesser extent 25—35.

. The incidence of fatal pulmonary tuberculosis appears to be most marked amongst female carpet workers between the ages of 15—25.

. The incidence of fatal pulmonary tuberculosis appears to be lower in male workers at the carpet industries especially up to the age of 35. The sex constitution of the population of Kidderminster is not available but I cannot imagine it is responsible for this variation.

. Whilst it is difficult to state the particular factor which unfavourably influences the death rate in females between 15—35 it seems to be associated with employment.

. This conclusion does not necessarily depend upon the nature of the work being causal, for from our own knowledge, workers are employed in carpet factories in Kidderminster who are probable sources of infection, and if such workers are in close surroundings the influence on the tuberculosis rate might easily be appreciable.

. Neither the Local Authority nor the County Council can prevent active tubercular cases following unsuitable employment in factories, nor may the factory employers be informed of the condition of any worker without the patient's consent.

. Possibly some progress in this direction might be made if Local Authorities would put a certain number of their lighter jobs at the disposal of infectious patients who are now working in Factories, and in this way entice them into open-air employment where the risk to others would be negligible. If such jobs were available, cases could be recommended by the Tuberculosis Officers.

. The County Medical Officer recently discussed the question of Tuberculosis in Kidderminster with a person who has a very intimate knowledge of the local conditions existing. The opinion expressed was that much more could be done to prevent the spread of infection in the home by the individual, as even the elementary rule that an active lung case requires a separate bed is not followed when by some small effort it often could be, the condition is looked upon as hopeless and assistance from the patients and families in efforts to cure or prevent are not sustained.

. The report in question was sent to the Kidderminster Corporation who have agreed to co-operate in carrying out a scheme of propaganda work.

. It is of interest to note the following paragraph from Dr. Craig's Annual Report for 1927 :—

“ The death rate (per 1,000 living) from pulmonary tuberculosis was 1.10 or in all 30 deaths, compared with twenty-eight in 1926. This increase again shows that Kidderminster is not sharing in that steady and appreciable decline that is taking place all over the Country, in respect of pulmonary tuberculosis. The average for the ten years ending 1926, was .94 compared with .88 in Stourbridge Borough, .68 in Oldbury Urban District, and .79 in Halesowen Urban District. The rate for the County averages .73. It may be asserted that it is unfair to compare Kidderminster to the County, or to towns where the occupation of the inhabitants is so different. Examinations of the returns of three towns in Yorkshire engaged in textile work, and fairly comparable to Kidderminster as regards occupation and employment of female labour, shows the figures for the same period to be K. 97, H. 84, D. 67. Moreover all three are showing progressive improvement.

“ The problem as to what practical steps are to be taken to improve our position in regard to this disease is at once an urgent and difficult one. Greater care should be exercised in isolating known cases in the home—a separate bedroom should be made an essential. Parents who are aware of a tubercular family history should choose occupations for their children away from mill or factory. For females, domestic service makes a desirable alternative, as it can be followed in more bracing and healthier environments. Active cases should cease to follow employment which brings them in contact in confined spaces with other workers.”

Tuberculosis Regulations 1924.

. The quarterly returns under these Regulations have been received from Medical Officers of Health.

. A summary of these returns shows :

. That 1562 cases were remaining on the Register at the end of 1927 compared with 1520 at the end of 1926 and 1370 at the end of 1925.

. This figure (1562) was made up as under :

	Males.	Females.	Total.
Pulmonary —	569	516	1085
Non-pulmonary —	245	232	477
	814	748	1562

Deaths of Unnotified cases.

. In 14 cases during 1927 it was necessary to write to General Practitioners as to the non-notification of cases of tuberculosis who died. A reply was received in each case : in 10 it was thought that the notification had already been made and in the remaining four the diagnosis was not made until after death.

. In addition to these cases, there were 16 other cases where it was unnecessary to make further enquiries.

Institutional Treatment.

. There has been no change in the number of beds available and though at times we have a considerable waiting list, for a month or two during the winter we had empty beds with no patients to fill them.

. It is interesting in this connection to note from the analysis by the Ministry of Health of statistics from the various Authorities, that Worcestershire had 52 beds available per 100 tuberculosis deaths in the County in 1926 as against an average of all other County Councils of 56.

. As we have 260 deaths a year on an average in the County, we should have 145 beds instead of 117, *i.e.* another 28 beds to bring our total up to the average number supplied by other County Councils.

Table IV. sets out the beds available and Table V. the extent of Residential Treatment in 1927. December 31st is a bad date to give the extent of residential treatment as there has just been a general desire to get home for Christmas and other patients are less anxious to go in during the winter.

. Table VI. gives the immediate results of Sanatorium treatment.

Institutional Treatment.

TABLE IV.

	Observation. *	Pulmonary Tuberculosis.		Non-Pulmonary Tuberculosis.		Total
		"Sana- torium" Beds.	"Hos- pital" Beds.	Disease of Bones and Joints.	Other Con- ditions	
Adult Males	—	31	14	3		48
Adult Females	—	25	14	2		41
Children under 15	—	8	*	20		28
Total	—	64	28	25 †		117

* Beds used as required.
† Approximate.

TABLE V.
RETURN SHOWING THE EXTENT OF RESIDENTIAL TREATMENT.

			In Institutions on Jan. 1.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31.
Number of Patients	Adults.	M.	36	142	136	12	30
		F.	31	114	115	8	22
	Child- ren.	M.	14	32	32	—	14
		F.	5	18	12	—	11
Number of Observation Cases	Adults	M.	4	21	24	—	1
		F.	4	13	14	—	3
	Child- ren.	M.	1	9	7	—	3
		F.	—	3	3	—	—
	Total		95	352	343	20	84

This Table shows that :

- (1) 256 were pulmonary cases (72% with positive sputum)
59 were non-pulmonary cases
48 were observation cases
- (2) Of the 256 pulmonary cases :

130 were males (80% with positive sputum)
107 were females (68% with positive sputum)
19 were children (42% with positive sputum)
- (3) The condition on discharge of these 256 pulmonary cases was :

Quiescent	—	—	—	—	—	15
Improved	—	—	—	—	—	155
No material improvement			—	—	—	66
Died in Institutions	—	—	—	—	—	20
- (4) Non-pulmonary cases—Total 59.

Bones and Joints	—	—	—	—	—	47
Abdomen	—	—	—	—	—	5
Other organs	—	—	—	—	—	4
Peripheral glands	—	—	—	—	—	3

Refusals to accept Institutional Treatment.

The following explanations were given by patients for not accepting a bed when offered, although they had previously consented and their names had been entered on the waiting list :

Too unwell to travel	—	—	—	—	9
Family and business reasons	—	—	—	—	4
Did not consider Sanatorium treatment necessary	—				9
Under private treatment	—	—	—	—	2
Postponed for time being	—	—	—	—	5
No definite reason given	—	—	—	—	7
No reply to admission notice		—	—	—	1
In hospital	—	—	—	—	1
					—
					38
					—

As it was found that some patients consented to Sanatorium treatment when asked by the Doctor, and then, when their turn came, wrote saying they would not accept, a system has now been adopted whereby a letter is sent to each patient directly his or her name is placed on the waiting list, informing them to that effect and asking that the Office should be notified immediately if any difficulty arises making it impossible for the patient to accept the bed when available. It is hoped that this procedure will obviate having beds unnecessarily vacant.

Dispensary Treatment.

The Malvern Dispensary was closed in September 1927, otherwise the Dispensaries and the hours of attendance remain the same over the County. Owing to the transfer of a part of Oldbury to Smethwick, the Warley Dispensary was no longer required and this was closed in March 1928.

TABLE VII.
Dispensary Work.

Dispensary.	Address.	Medical Officer.	Day and Time.	Total No. of Attendances 1927.	Average attendance per Session 1927.
Bromsgrove	Technical School, New Road	Dr. Turner	Tuesday, 3 p.m.	168	3.2
Evesham	Town Hall	Dr. Harthan	Tuesday, 10 a.m.	125	2.4
Halesowen	14 Laurel Lane	Dr. Turner	Wednesday, 5 p.m.	220	4.2
Kidderminster	19 Lion Street	Dr. Turner	Thursday, 2 p.m. & 5 p.m.	367	7.0
Oldbury	25 Church Street	Dr. Turner	Friday, 6.0 p.m.	477	9.3
Redditch	Nissen Hut, Elm Road	Dr. Turner	Monday, 3 p.m.	102	2.1
Stourbridge	Dispensary	Dr. Hanby	Monday, 5 p.m.	384	7.9
Worcester	29 Foregate Street	Dr. Clover	Wednesday, 3 p.m.	146	2.8

Diagnosis.	Pulmonary.				Non-Pulmonary.				Total.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—NEW CASES examined during the year (excluding contacts) :												
(a) Definitely tuberculous	131	138	19	7	25	29	37	25	156	167	56	32
(b) Doubtfully tuberculous	—	—	—	—	—	—	—	—	45	43	37	25
(c) Non-tuberculous	—	—	—	—	—	—	—	—	10	16	11	4
B.—CONTACTS examined during the year :—												
(a) Definitely tuberculous	1	9	1	1	—	—	3	1	1	9	4	2
(b) Doubtfully tuberculous	—	—	—	—	—	—	—	—	6	17	19	14
(c) Non-tuberculous	—	—	—	—	—	—	—	—	18	50	74	82
C.—CASES written off the Dispensary Register as												
(a) Cured	9	12	4	8	3	9	7	8	12	21	11	16
(b) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error)	—	—	—	—	—	—	—	—	62	104	119	103
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—												
(a) Diagnosis completed	413	334	75	67	61	74	126	99	474	408	201	166
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	39	38	45	32

TABLE VIII—Continued.

1.	Number of persons on Dispensary Register on January 1st	—	1247
2.	Number of patients transferred from other areas and of "lost sight of" cases returned	— — — — —	30
3.	Number of patients transferred to other areas and cases "lost sight of"	— — — — —	94
4.	Died during the year	— — — — —	230
5.	Number of observation cases under A (b) and B (b) above in which period of observation exceeded 2 months	— —	110
6.	Number of attendances at the Dispensary (including Contacts)	—	1998
7.	Number of attendances of non-pulmonary cases at Orthopaedic Out-stations for treatment or supervision	— — —	152
8.	Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for		
	(a) "Light" treatment	— — — —	12
	(b) Other special forms of treatment	— — — —	—
9.	Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary	— — — —	—
10.	Number of consultations with medical practitioners :—		
	(a) At Homes of Applicants	— — — —	107
	(b) Otherwise	— — — —	
11.	Number of other visits by Tuberculosis Officers to Homes	—	1274
12.	Number of visits by Nurses or Health Visitors to Homes for Dispensary Purposes	— — — — —	9720
13.	Number of—		
	(a) Specimens of sputum, etc., examined	— —	1287
	(b) X-ray examinations made in connection with Dispensary work	— — — — —	46
14.	Number of Insured Persons on Dispensary Register on the 31st December	— — — — —	520
15.	Number of Insured Persons under Domiciliary Treatment on the 31st December	— — — — —	61
16.	Number of reports received during the year in respect of Insured Persons :—		
	(a) Form G.P. 17	— — — — —	9
	(b) Form G.P. 36	— — — — —	123

Contacts.

. Table IX. sets out the results of the examinations of contacts.

TABLE IX.

Total Number of Contacts examined during 1927					—	—	296
(a)	Adults	—	Male	25	Female	—	76
(b)	Children	—	Male	97	Female	—	98
Number with Tuberculosis.							
(a)	Adults	—	Male	1	Female	—	9
(b)	Children	—	Male	4	Female	—	2
Not suffering from Tuberculosis.							
(a)	Adults	—	Male	18	Female	—	50
(b)	Children	—	Male	74	Female	—	82
Still under observation.							
(a)	Adults	—	Male	6	Female	—	17
(b)	Children	—	Male	19	Female	—	14

In addition to these, many child contacts have been examined in the course of School Medical Inspection.

Environmental conditions.

. The reports on the environmental condition of patients are now being made by the Health Visitors. A form is sent to the Health Visitor to be filled up for each definite case. On completion she returns it to the Office. After scrutiny at the office, these reports are sent to the Tuberculosis Officer for that District and attention is called to any serious defect. On receiving a confirming report from the Tuberculosis Officer, notice is sent of all remediable defects to the Medical Officer of Health.

. The total number received from Nurses during 1927 was 39 but this does not represent a full year's working.

. The whole-time Tuberculosis Officer for the north of the County (Dr. Turner) has during the year made enquiries as to the sleeping accommodation of patients with tubercle bacilli in their sputum.

. In the Dispensary areas of Redditch, Bromsgrove, Halesowen, Kidderminster and Oldbury where there are 238 such cases on the Registers, only 51.7% sleep in a separate bed. In other words, practically one-half of the infectious cases in these areas sleep with wives, children or brothers and sisters and are causing serious risk to those relations.

. The worst district is Oldbury, where only 42.6% have separate beds. Kidderminster is next with 49.4%, then Redditch (54.5%), Halesowen (56.6%) and Bromsgrove (61.4%).

. If a quantity of single bedsteads could be obtained and stored in each District, they could be loaned to patients who were willing to use them and had space for the extra bed.

Extra Nourishment.

. For the year 1927, the sum of £440 was available for food allowances. 59 patients received milk, eggs and butter to the value of 5s. 0d. per week, and the total expenditure amounted to £393.

. The allowances are made quarterly and before re-issue, a request is made to the After-Care Representative (if any) to state his or her views as to whether the financial circumstances have altered and whether or not the allowance should be continued. In practically every case, the After-Care Representative asked for the allowance to be continued.

. It was discovered that one patient was not receiving as much as he was entitled to and a full enquiry was therefore made into all cases and patients were asked to see that they got full value for the 5s. 0d.

Shelters.

. Each of the 45 shelters has been in use during the year. The cost of removals is gradually getting less, and as opportunity occurs, shelters of the verandah type are brought into store and converted into more portable structures.

. As will be seen under "Environmental conditions," a suggestion has been made that beds should be loaned to those cases who are sleeping with others whom they are likely to infect.

Non-Pulmonary Tuberculosis.

. The treatment of this class of case is now on a very definite basis. The arrangements are :

In-patient treatment, at Birmingham Royal Cripples Hospitals at Woodlands and Forelands.

Worcester General Infirmary.
Shropshire Orthopaedic Hospital.
Kidderminster General Hospital.
St. Gerard's Hospital, Coleshill.
Birmingham Queen's Hospital.

Out-patient treatment and After-Care.

(a) Stourbridge After-Care Clinic. Each Thursday at 9.30 a.m.

(b) Redditch After-Care Clinic. Each Monday at 2 p.m.

An Orthopaedic Surgeon and Nurses from the Birmingham Royal Cripples Hospital are in charge of these Clinics.

(c) Birmingham Royal Cripples Hospital, Out-patient Dept. For cases who cannot attend at Stourbridge or Redditch and also for massage.

(d) Worcester General Infirmary. Out-patient Dept.

An Orthopaedic Surgeon and Nurses from the Worcester Infirmary are in charge of this Clinic.

(e) Orthopaedic Nurse for the South of the County. In conjunction with the City Council, Miss Woods was appointed by the Worcestershire Association for Mental and Physical Welfare, on the 11th October 1927, and besides helping at the Clinic, visits all cripples in the south of the County and not only supervises progress but gives practical help to the child.

In-patient treatment.

. During 1927, the following cases were discharged from Hospital and their immediate results of treatment are included in Table VI.

Worcester General Infirmary	—	—	—	—	5
Kidderminster General Hospital	—	—	—	—	9
Birmingham Queen's Hospital	—	—	—	—	3
Birmingham Royal Cripples Hospitals	—	—	—	—	10
Shropshire Orthopaedic Hospital	—	—	—	—	4
Heatherwood Hospital	—	—	—	—	2
County Sanatoria	—	—	—	—	26
					—
					59
					—

Out-patient treatment.

. The Stourbridge Clinic was open during the whole of 1927 and Redditch only started work on the 5th December.

. 152 attendances of tuberculous patients were made at these Clinics, while 10 other attendances were made at the Broad Street Clinic which is more convenient for certain cases.

Provision of Surgical Apparatus.

. A total of 51 separate articles was supplied to tuberculous non-pulmonary cases during 1927. These consisted of Boots, Frames, Supports, Plasters, Irons, etc.

After-Care.

. 71 After-Care Representatives were appointed and practically the whole of the County is covered. All cases where difficulties arise are referred to these Ladies and Gentlemen and in every case help has been forthcoming. In particular, all food allowances are referred to the Representatives, both before the original grant is made, and also before regranting at the beginning of each quarter.

Nurses Visits.

. Each definite case is entered on a Nurse's list to visit monthly, and 9720 visits to the homes of patients were made during 1927.

. This number of visits is less than last year, as it has been found that certain patients who are at work and keeping well do not need monthly visits: quarterly or six-monthly supervision being sufficient. This has relieved the Nurses of a certain amount of visiting which was often of little use as the patient was out.

. As heretofore, these reports are carefully noted in the office and a copy of any special remark calling for attention, is sent to the Tuberculosis Officer for visit and report.

Artificial Pneumothorax Treatment.

. Only two cases are at present receiving refills regularly at the Worcester Dispensary.

. In addition, by arrangement with the Worcester City Council, two cases now residing in the City, are being treated by the County Tuberculosis Officers.

Nursing.

. The Scheme by which local Nursing Associations were paid for nursing undertaken by their Nurses was used to a small extent during the year. 1222 visits were made to 17 patients. It should be borne in mind that these nursing vouchers are only issued in cases where no arrangement for nursing has been made by the patient, and where actual nursing, other than supervisory visits, is required.

X-Ray Examinations.

. X-ray examinations for the purpose of diagnosis, in conjunction with pneumothorax treatment, etc. were made in 46 cases during the year.

(Signed) H. GORDON SMITH, M.A., M.B., B.Ch., D.P.H.,
Chief Tuberculosis Officer.

Public Health Department,
29, Foregate Street,
Worcester.

July, 1928.

TABLE XI
PULMONARY

Condition.			Previous to 1926.					1926.					1927.					
			Class T.B. minus	Class T.B. plus				Class T.B. minus	Class T.B. plus				Class T.B. minus	Class T.B. plus				
				Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus)	
ALIVE.	Cured.	Adults	M.	172	12	4	-	16	-	-	-	-	-	-	-	-	-	-
		F.	147	1	2	1	4	-	-	-	-	-	-	-	-	-	-	
		Chil- dren	M.	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F.	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Disease arrested.	Adults	M.	15	8	2	-	10	-	-	-	-	-	-	-	-	-	-
		F.	11	1	1	-	2	-	-	-	-	-	-	-	-	-	-	-
		Chil- dren	M.	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F.	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Disease not arrested.	Adults	M.	51	25	48	21	94	12	8	21	2	31	40	13	38	9	60
		F.	52	9	28	8	46	25	8	17	5	30	55	13	26	4	43	
		Chil- dren	M.	25	2	3	2	7	13	-	1	-	1	15	-	2	-	2
		F.	25	-	2	2	4	6	-	-	1	1	4	-	1	1	2	
	Dead	Adults	M.	73	12	141	247	400	15	1	10	36	47	17	-	1	11	12
		F.	89	5	68	231	304	8	-	6	27	33	21	-	3	21	24	
		Chil- dren	M.	7	-	-	7	7	-	-	-	1	1	4	-	-	-	-
		F.	9	1	1	11	13	-	-	1	-	1	2	-	-	-	-	
Transferred to Pulmonary																		
Condition not ascertained during Year				105	23	30	2	55	23	6	4	1	11	-	-	-	-	-
Lost sight of and left County				159	27	70	14	111	12	4	10	3	17	20	1	5	-	6
Totals -				*1033	126	401	546	*1073	114	27	70	76	173	178	27	76	46	149

* In addition to these totals there are :—
Dead - - - - - Unclassified 1159.
Lost sight of - - - - - Unclassified 496.

TABLE XII.
NON-PULMONARY.

Condition.			Previous to 1926.					1926.					1927.					
			Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total	Bones and Joints	Abdominal.	Other Organs.	Peripheral Glands.	Total	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total	
ALIVE.	Cured.	Adults	M.	35	8	5	16	64	-	-	-	-	-	-	-	-	-	
			F.	27	14	5	22	68	-	-	-	-	-	-	-	-	-	
		Chil- dren	M.	19	16	5	28	68	-	-	-	-	-	-	-	-	-	
			F.	19	11	3	35	68	-	-	-	-	-	-	-	-	-	
	Disease arrested.	Adults	M.	7	-	1	-	8	1	3	-	1	5	-	1	-	2	
			F.	5	2	-	3	10	-	1	-	3	4	1	1	-	3	
		Chil- dren	M.	6	4	1	3	14	5	5	-	1	11	-	1	-	1	
			F.	6	4	1	2	13	-	2	-	2	4	-	-	-	-	
	Disease not arrested.	Adults	M.	13	1	1	1	16	2	-	1	-	3	7	4	-	3	14
			F.	9	2	3	5	19	7	1	-	1	9	7	3	2	7	19
		Chil- dren	M.	17	1	-	5	23	7	2	2	3	14	14	5	-	11	30
			F.	14	3	5	4	26	5	1	1	1	8	7	4	-	10	21
	Dead	Adults	M.	16	4	5	1	26	2	-	-	-	2	1	1	3	2	7
			F.	5	9	3	5	22	-	-	-	-	-	1	3	1	1	6
		Chil- dren	M.	7	10	5	2	24	-	3	1	1	5	1	1	6	-	8
			F.	1	6	2	-	9	-	-	-	1	1	-	1	6	-	7
Transferred to Pulmonary				1	1	1	-	3	-	-	-	-	-	-	-	-	-	
Condition not ascertained during Year				24	10	5	22	61	7	8	2	6	23	-	-	-	-	
Lost sight of and left County				30	6	4	23	63	8	5	-	4	17	1	3	1	3	8
Totals - *				261	112	55	177	605	44	31	7	24	106	40	28	19	39	126

